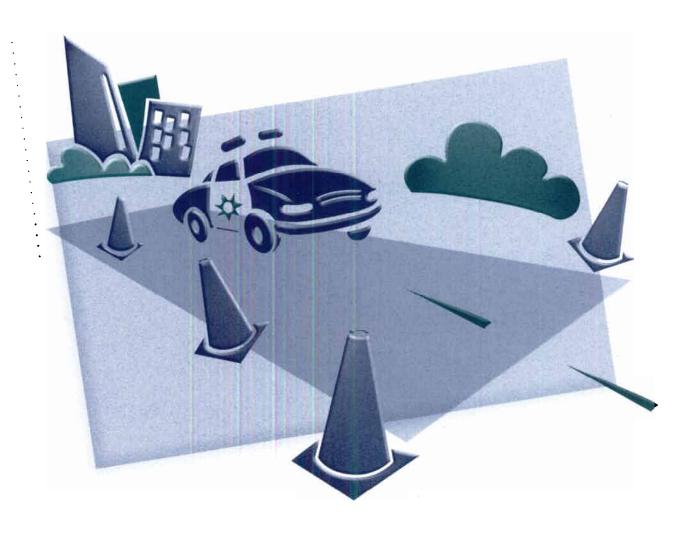


Driver Awareness Instructor Course Manual





California Commission on Peace Officer Standards and Training

Driver Awareness Instructor Course

Commission on Peace Officer Standards and Training January 1999

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Preface

The *Driver Awareness Instructor Manual* has been created to serve as a training guide and reference manual for instructors of the in-service Driver Training Awareness Course. These instructors train peace officers in defensive driving techniques. In-service driver training should enhance the safety and raise the level of skills of peace officers statewide. The basic skills and techniques presented in this course can and should be applied during the operation of any motor vehicle.

Using the training information compiled in this instructor manual, and the driving skills learned in the course presentation, instructors will be able to return to their respective agencies and implement a comprehensive eighthour, in-service course for peace officers who regularly operate motor vehicles.

Concepts developed in this course are based on information provided by representatives of a statewide Emergency Vehicle Operations Course (EVOC) training advisory council of local law enforcement in cooperation with POST. Questions about the certified course should be directed to the Training Delivery and Compliance bureau at (916) 227-4862. Questions about the instructor manual should be directed to Training Program Services at (916) 227-4885.

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Instructor Outline

24-hour course

Course Goal

The student will develop the ability to locate a suitable site, obtain the necessary equipment, assign qualified instructors, and conduct an eight-hour Driver Awareness Course.

Introduction/ Orientation (.75 Hour)

Instructor's Note:

The support material for this outline is included in the Driver Awareness Instructor Manual. This outline is not intended to be an all-inclusive teaching document. An hourly distribution is attached with a suggested teaching schedule. This hourly distribution will offer suggestions as to how to schedule a more effective presentation.

Learning Goal

The student will comprehend the purpose, philosophy and overview of the Driver Awareness Instructor Course.

1. Registration and Orientation

- Forms completion
 - Roster(s) and other agency or POST forms
 - Evaluation forms
- · Facility rules
 - Safety and communication concerns
 - Facility orientation

2. Instructor Course Purpose

- Train a cadre of trainers
- · Increase frequency of refresher courses for in-service

Introduction/ Orientation (continued)

- Traffic collision reduction
- Reduce departmental liability

3. Course Philosophy

- · Safe and defensive driving priority
- Proper use of basic driving principles
- Create enthusiasm in the instructor

4. Overview of Driver Awareness Instructor Course

- · Review course outline
- Review training exercises through visuals

5. Overview of Teaching Assignments for Students

6. Handouts

- · Review printed material
- · Review list of visual aid

Manual Familiarization (.5 Hour)

Learning Goal

The student will understand the components of the Driver Awareness Course Instructor Manual, and how to find specific information.

1. Emphasize Importance of Knowing Material prior to Training

· Designed to prepare the instructor to teach the course

Manual Familiarization (continued)

- · Reference guide
- Establish credibility with students

2. Review Key Elements of Manual

- Chapter by chapter summary
- Review all ten driving exercise diagrams

Course Management (3.75 Hours)

Learning Goal

The student will understand the requirements of Driver Awareness Course Management, including site preparation, course design, equipment, resources, safety, control, evaluation of performance, scheduling, format, hours, documentation, and contingency planning.

1. Site Preparation

- Convenient location
- Adequate classroom facilities
- Avoid residential areas
- · Flat surface
- Minimal obstructions (e.g., poles, curbs)
- · Restrooms available
- Permits/approvals, if necessary

2. Course design

- Adequate spacing between exercises
- Five exercise course (chosen from exercises in this manual)

Course Management (continued)

- Pre-marking of cone placements to reduce set-up time
- Design course for size of car
- Utilize one vehicle type when possible

3. Equipment/Resource Materials

- Vehicles: Similar to patrol vehicle and mechanically safe with law enforcement equipment
- · Communications available
- Cones and delineators
- Additional equipment (e.g., spray paint, clipboards, and visual aids, etc.)

4. Safety and Control

- Available first aid kit/fire extinguisher
- Know hospital location
- Keep area clear and free of obstructions
- Provide proper supervision
- · Use seat belts
- Do not allow high speeds/horseplay
- Area should be kept clear of other traffic during training

5. Evaluation of performance

- Each student should be objectively evaluated, when possible.
- Improvement needed evaluations require instructor comments.

Course Management (continued)

6. Remediate weak performance

7. Scheduling

- Refresher training every two years
- Identify and prioritize employees to be trained
- Record keeping

8. Format and hours

- Eight hours minimum
- Recommended four-hour lecture
- Student-to-instructor ratio shall follow POST safety guidelines

9. Documentation

- Student
 - · Names
 - Evaluations
 - Dates and time of training
- Instructor
 - Names
 - Training
 - Experience
 - Lesson plans

10. Contingency Planning

Alternate site

Course Management (continued)

- · Practice set-up
- Alternate classroom
- Back-up instructors

Instructor Training Review (2.0 Hours)

Learning Goal

The student will understand the components of being an effective instructor.

- 1. Attributes of an Effective instructor
- 2. Suggestions for Successful instruction
- 3. Elements of Good instruction
- 4. Four-Step Teaching Method
 - Introduction
 - · Presentation
 - Application
 - Evaluation

Basic Driving Principles (1.5 Hours)

Learning Goal

The student will understand the elements of the Basic Driving Principles and their effects on vehicle control, which include: Weight Transfer, Steering Control, Throttle Control, Speed Judgment, Brake Application, and Roadway Position.

- 1. Basic Driving Principles
 - Weight Transfer

Basic Driving Principles (continued)

- Steering Control
- Throttle Control
- Speed Judgment
- Brake Application
- · Roadway Position
- 2. Proper Application and Coordination Results in Safety and Control
- 3. Seat Belt Usage (refer to Defensive Driving addendum)

Driving Exercises Review (2.0 Hours)

Learning Goal

The student will understand the fundamentals of how to drive and present each of the exercises.

- 1. Students will observe an instructor driven demonstration of each exercise from outside the vehicle
- 2. Walk through each exercise with an in-depth explanation and discussion
- 3. Instructor drives and demonstrates with students in the vehicle

Legal Aspects/ Code-3 Driving (1.5 Hours)

Learning Goal

The student will understand specific California statutes, Code-3 driving tactics, and case law decisions presented in the Driver Awareness Course.

Legal Aspects/ Code-3 Driving (continued)

1. California Law

- · Vehicle Code
 - 17001 C.V.C.
 - · 17004 C.V.C.
 - · 21055 C.V.C.
 - · 21056 C.V.C.
 - · 21806/21807 C.V.C.
 - 22350 C.V.C.
 - 17004.7 C.V.C.
- Other state codes
 - Section 13519.8 Penal Code
 - Mandates minimum standards for agency pursuit policy
 - Mandates minimum training standards for pursuit training
 - Section 669 Evidence Code
 - · Mandates policy compliance
 - · Violation of policy is negligence per se

2. Key element of Peterson vs. City of Long Beach Code-3 Liability Considerations

- Clearing intersections
 - Stop (if necessary)
 - · Lane-by-lane

Legal Aspects/ Code-3 Driving (continued)

- Passing
- · Speed awareness
- · Limitations of emergency warning devices

3. Pursuit Driving

- 13519.8 P.C. Pursuit Guidelines (refer to addendum 13519.8 PC)
 - Twelve Pursuit guidelines
 - · Mandated by law
- Department policy requirements

4. Case Law

- · Peterson vs. City of Long Beach
- Brummett vs. County of Sacramento
- Duarte vs. City of San Jose
- Grant vs. Petronella
- Stark vs. City of Los Angeles
- Federal case law considerations

Second Set of Driving Exercises (2.0 Hours)

Instructor's Note:

Rotation of students in small groups evaluated by the EVOC staff (student role)

Learning Goal

The student will develop the ability to execute the driving principles of each exercise.

- 1. Perfecting driving skills
- 2. Demonstrate the driving principles of each exercise
- 3. Remediation, if necessary

Evaluation of Student Driving Exercises (2.0 Hours)

Instructor's Note:

Evaluate the student's performance on each exercise (instructor role)

Demonstration Techniques For Driving Exercises (1.0 Hour)

Instructor Note:

This takes place entirely in the classroom. Visual aids of the driving exercises will be necessary for this presentation.

Student Lecture Presentations – Teacher Training (3.0 Hours)

Instructor Note:

The students will be divided between Classroom Presentation and Driving Exercises and will operate simultaneously. The class will participate in both course stages.

Learning Goal

The student will develop the ability to evaluate the driving performance of other students.

- 1. Identify problems and provide feedback to student
- 2. Record driving performance

Learning Goal

The student will understand how to explain and demonstrate the driving exercises and use of visual aids to assist in the instruction.

- Driving speeds during demonstrations and training
- 2. Driving reference points
- 3. Driver/instructor communication and coordination
- 4. Miscellaneous tips on instructor expertise

Learning Goal

The student will demonstrate the ability to prepare a lesson plan on an assigned topic and give a fifteenminute presentation.

- 1. Lesson Plan
- 2. Presentation
- 3. EVOC Instructor and audience critique

Driving Exercises – Groups of Two (3.0 Hours)

Learning Goal

The student will develop the ability to present and evaluate each driving exercise.

- 1. Students will rotate from driver to instructor
- 2. Students will participate in both phases of each exercise

Review and Critique of Course (1.0 Hour)

Hourly Distribution Schedule 24 Hours

	T	
Day	Time	Subject
One	.75 Hour	Introduction and Orientation
Olle	2.0 Hours	
	1.5 Hours	Teacher Training Review (classroom)
	2.0 Hours	Basic Driving Principles (classroom)
	2.0 Hours	Driving Exercises Review (practical application)
	1.75 Hours	Instructors will explain & demonstrate exercises
	1./5 Hours	Course Management (classroom)
Two	.5 Hour	Manual Familiarization (classroom)
	1.5 Hours	Legal Aspects/Code-3 Driving (classroom)
	2.0 Hours	Driving Exercises (practical application)
	2.0 110415	Rotation in small groups & students drive
	.25 Hour	Course Management (Continued) (classroom)
	.23 110th	Explanation on evaluating student performance &
		provide remediation of driving exercises
	2.0 Hours	Driving Exercises (practical application)
	2.0 110415	Learn to evaluate the performance of other students
	1.75 Hours	Course Management (classroom)
		(**************************************
Three	1.0 Hour	Demonstration Techniques for Driving Exercises
Tillec	1.0 1100	(classroom)
	3.0 Hours	Student Lecture Presentations—Half the class will
	5.0 110 415	rotate with Driving Exercise Group (classroom)
		Driving Exercises—Half the class will rotate with
	3.0 Hours	Student Lecture Group & evaluate the other students
		driving the exercises (practical application)
	1.0 Hour	Review and Critique of course (classroom)

Chapter One

introduction and orientation

Registration

Registration will consist of:

- · A roster of participants and related materials
- POST course control number and forms
- Course grade forms
- Explanation of safety and facility rules

Course Purpose and Philosophy

- Implementation of this course will conveniently allow the maximum number of field personnel to be exposed to driver training on a more frequent basis.
 - A training cadre of instructors will ensure consistency in training.
 - It is the intent of the course to enhance the efficiency and safety of law enforcement vehicle operations.
 - A desired result is a reduction in accident statistics and subsequent reduction in civil liability.
- The philosophy of this course is that emphasis will be placed on smooth application of the basic driving principles (Vehicle Control Techniques), which are discussed later in this text.
 - · All principles are interrelated.

Course Purpose and Philosophy (continued)

- Proper coordination of these principles will result in maximum vehicle control and safety.
- Emphasis on proper techniques also has a direct relationship on vehicle operation at increased speed.
- The Emergency Vehicle Operations Course (EVOC) staff intends to raise the individual instructor's level of knowledge in these areas and to ensure the course is set up properly.

Course Outline

The course of instruction will consist of those items listed in the eight-hour course outline, and will be discussed in the classroom with a specific outline listed later in this manual.

Teaching Assignments

Each student will be required to prepare and deliver a lecture to the class.

- 10-15 minute duration.
- Presented on third day of course.
- Topic to be assigned by EVOC staff.
- Subject material to be taken from <u>Driver Awareness</u> <u>Instructor Course</u> manual.
- Brief pencil copy outline to be given to Lead Instructor before presentation.

Chapter Two

instructor training and presentation

Introduction

The following pages will cover certain key elements while preparing for and actually conducting the instruction of the Driver Awareness Course. Teaching or instructing have been described as both an art and a science. There is an element of truth in both viewpoints. Instruction must be preplanned, organized in a logical sequence, diversified in its approach to stimulate learning, far sighted in its purpose yet specific where necessary, and flexible enough to address unique issues as they occur. However, even with the proper combination of these elements, a training program cannot be ensured of reaching its students without certain instructor talents coming across in the teaching/learning process. Patience, dedication and enthusiasm, also a relaxed, confident application of public speaking skills, are an integral part of successful instruction. Students are more receptive when they see that the teacher is knowledgeable, believes in what is being taught, and attempts to make the learning process both informative and satisfying.

Because of the limited time available with this instructor course, it is obvious that the student cannot become a seasoned teacher. With the basic elements highlighted and discussed, along with some practical application, the student can continue the process of self-evaluation and self-improvement. This manual contains additional information, not necessarily discussed within the limited period of the 24-hour instructor course, which can be used to aid in later preparation of the eight-hour Driver Awareness Course.

INSTRUCTOR PHILOSOPHY

"TODAY, I AM A TEACHER. BEFORE I SPEAK OR ACT, LET ME REMEMBER THAT FOR THIS BRIEF, PRECIOUS MOMENT, I HAVE A LIFE IN MY HANDS -A HUMAN LIFE. IF THERE IS SOMETHING I CAN SAY OR DO TO INSPIRE A DESIRE TO LEARN, TO SUCCEED, TO ACCOMPLISH, LET ME NOT FAIL."

THE LAW ENFORCEMENT INSTRUCTOR/TRAINER AS A ROLE MODEL

TO EFFECTIVELY TEACH AND DEVELOP YOUR STUDENTS REQUIRES A BASIC QUALITY IN THE TEACHER WHICH CANNOT BE CREATED BY SIMPLY PROVIDING SKILLS, OR BY EMPHASIZING THE IMPORTANCE OF THE TASK. IT REQUIRES "INTEGRITY OF CHARACTER."

THE TEACHER IS ALWAYS AN EXAMPLE. WHAT A TEACHER DOES IS IMPORTANT, BUT EQUALLY IMPORTANT IS WHO THE TEACHER IS. IT IS INDEED A TWO-FOLD DIMENSION:

- 1. THE DIMENSION OF SKILL AND PERFORMANCE.
- 2. THE DIMENSION OF PERSONALITY, EXAMPLE AND INTEGRITY.

THE PROFESSIONAL TRAINER

Trainers must teach much more than the endless list of law enforcement topics. They must teach about life, values, and character. Dedicated trainers must role model their belief system and provide motivation and inspiration for our brave cadre of law enforcement students.

All of us, who proudly bear the title of "trainer" must speak to the "hearts and souls" of our students. With genuine compassion we should unselfishly give of ourselves to those whose lives and careers rest upon us.

With intense passion let us empower the "peace keepers" who serve, protect, and keep order in our beloved country.

CORE VALUES OF A PROFESSIONAL INSTRUCTOR

- PATIENCE
- INTEGRITY
- COURAGE
- DISCIPLINE
- HUMILITY
- LOYALTY
- **CONVICTION**
- DILIGENCE
- OPTIMISM
- **COMPASSION**
- RESPECT

Attributes of an Effective Trainer

- · Well versed in the subject matter.
- Knowledge of the learning process.
- Proficient and organized in the preparation of lesson plans.
- Goal oriented approach.
- Skillful in the techniques of teaching.
- Adept in the utilization of training aids.
- Enthusiastic.
- Professional appearance.
- · An effective communicator.
- Imaginative.
- Perceptive to and supportive of student needs.
- Receptive to critiques, evaluations, and feedback.
- Patient.

Suggestions

Suggestions for successful teaching that will make the teaching job easier and more helpful for the students.

- Knowing the subject yourself.
- Having the undivided attention of the students.
- Motivating the students' desire to learn.
- Starting with the known and leading into the unknown.
- Teaching simple things first and gradually leading up to the difficult.

Suggestions (continued)

- Giving a reason for each step and telling them WHY.
- Keeping the explanation to the point.
- Demonstrating correctly what the student will be required to do later.
- Encouraging discussion, especially questions.
- Giving the student a chance to express, in some way, each portion of what has been taught.
- Remembering that emotions play an important part in learning, the instructor should set a tone of respect and not fear.
- Checking, from time to time, to see how well the information is retained and used.
- Remembering the importance of examples as teaching tools.
- Planning your teaching in advance, asking:
 - What shall I teach?
 - Why teach it?
 - How can I successfully deliver the message?
 - What does the student already know that is similar?
 - · Which method of teaching shall I use?
 - What is the best way for students to show me what they have learned?
 - Which is the best "follow up" to assure me and the student that the information is understood and correctly used?

Suggestions (continued)

- Training aids, used properly and timely:
 - · Increase student interest.
 - · Increase student retention of the subject matter.
 - Increase student understanding.
 - Make the teaching job more interesting for you.

Elements of Good Teaching

- · Being patient.
- Never yelling or ridiculing students.
- Never hurrying a lesson; getting it right the first time.
- Presenting material when you have the students' attention.
- Not talking down to students, nor talking over their heads.
- Knowing your subject matter thoroughly and knowing the procedures to be used in the lesson.
- Rewarding students with appropriate praise.
- Encouraging students to put what they have learned into practice.

The Four-Step Method of Instruction

- This method is a natural procedure applicable to any instructional situation.
- A logical process of first getting the attention and interest of the individual; then presenting the information to be learned; giving the student a chance to practice; and finally determining that the student has actually learned through evaluation.

· Step One: Introduction

- Identify your students' background and experience to assist you in building a rapport which will lead to a receptive learning environment.
- This is not the time to introduce new information.
- Develop a foundation upon which the instruction can be built.
- Focus the students' interest on the lesson to be learned to provide students with a motive and enthusiasm for learning.
- With the introduction, tell students the reasons for being there and what the results of a successful learning experience should be.

Step Two: Presentation

- The objective of the second step of the process is to impart the new knowledge or skills to the students.
- There must be some relationship of the new knowledge to known ideas and experiences.
- The instructor must arrange the material to be taught in an effective order, placing emphasis on the essential aspects.

The Four-Step Method of Instruction (continued)

Step Three: Application

- The third step affords the students the opportunity to put to use the information prepared for and presented in the previous steps.
- It will reveal the students' grasp of the details of the new subject matter and the ability to progress.
- It is the instructor's responsibility to help students when necessary.

Step Four: Evaluation

- The last step in the teaching process is an evaluation of the students' progress.
- Determine the present abilities of the students and their readiness to move on to a new phase of the instruction.
- No matter what method of evaluation, students must know the nature and extent of their successes and failures.
- The students' progress is an indication of the effectiveness of the teaching.

Four Steps of Instruction

Purpose

Step I – Introduction

- Interest the students so they want to learn by:
 - Attention--Attract
 - · Curiosity--Arouse
 - · Interest--Create
 - Desire--Stimulate

Method

- · Ask leading questions
- Use informal questions
- Give suggestive illustration or demonstration
- Relate a personal experience
- Put emphasis on present or future needs of students
- · Cite an example
- Show reason for personal interest
- Stress importance of learning information correctly
- State performance objectives

Purpose

Step II – Presentation

Show and explain to the students so they understand the proper procedure and methods to use.

Method

- Give demonstrations
- Explain procedures step-bystep
- Use teaching aids
- Develop discussions
- Follow teaching content analysis
- Emphasize key and safety points

Four Steps of Instruction

	Purpose	Method
Step III – Application	To apply what has been taught in Step II	Have student perform the task
	 Active application by the student 	 Supervise performance closely
		 Check and correct errors
		 Develop correct habits
		· Check key and safety points
		 Have student repeat operations, if necessary
	Purpose	Method
Step IV – Evaluation	To determine the extent of learning, and areas	 Have student perform the task
	• To test the instructor and	• Have student repeat the task
	the student	 Ask prepared questions
		• Give written tests
		• Give performance tests
		 Develop discussions

How to Teach Using the Four Steps of Instruction

To illustrate the differing characteristics of the steps of instruction when teaching an individual and when teaching a group, the following chart compares purposes and methods applicable to each situation in each of the four steps of instruction.

Using the Individual Instruction Method

The introduction step is characterized by the personal, informal approach. It can be given anywhere and at any time. Physical placement is not important for the short, impromptu introduction for a practical task. The approach is good psychologically since the student is ready for immediate use of the material. Furthermore, individual differences may be dealt with adequately.

The actual steps required must be presented by the instructor. However, allowances can easily be made for individual differences by adding detail or skipping elementary steps, depending upon the background, experience, and ability of the student.

Using the Group Instructional Method

A general approach on the extensive provisions and scheduling in regard to the physical placement of the group is characteristic of the introduction to group teaching. The length of time devoted to introduction is usually longer than for individual instruction since the entire group must be motivated and the introduction must meet the average of group development.

The steps required are presented in the proper order with ample time for questioning and discussion. Emphasis on various key points in the procedure may be necessary. The pace of instruction must be adjusted so that the group members are able to follow the complete presentation.

Introduction

Presentation

How to Teach Using the Four Steps of Instruction

Using the Individual Instruction Method

Instructional Method Lack of equipment frequently prohibits the individual from

Using the Group

Application

The student may apply the information acquired from the instructor under the close supervision of the instructor. Questions may be answered when needed and errors in performance corrected immediately.

prohibits the individual from immediate active participation. It is possible for errors to occur as individuals try out the procedure without detection by the instructor. Reteaching is frequently necessary.

Evaluation

A check on the accuracy of work may be made immediately while the details are fresh in the individual's mind. The test either may be oral or may consist of checking and inspection of other similar units of work completed.

Checking of the work performed may consist of oral tests, or merely inspection of the completed work.

- General application of the four-step method
 - All of the steps are important, but for any given set of circumstances they may not have equal importance.
 - It is the instructor's misinterpretation of the four-step method that can lead to failure in specific teaching situations, not a failure of the four steps themselves.

Instructional procedures

Lecture

- Because it is frequently the easiest, this method is much overworked.
- The lecture can quite often be ineffective, since lecturing assumes that all members of the class progress and learn at the same rate.
- The lecture, especially when it is short, may be the best way to put over some material, and therefore should not be overlooked.
- Lectures are made more effective by use of visual aids.
- Other important factors to consider for successful lecture teaching include:
 - Voice
 - Posture
 - Clothing
 - Arrangement of room (location of lights, ventilation, seating)

Demonstrations

- Make sure all class members can see what is being demonstrated.
- Explain "WHY" as you demonstrate.

- Demonstrate as often as is needed, however, if you have to go over it repeatedly, check your teaching techniques.
- · Stress safety during demonstrations.
- · Explanation during demonstrations
 - Explanation of the demonstration must be clear, concise, and as simple as possible to be effective.
 - Use understandable language, suited to the background of those being taught.
- Student application considerations
 - Repetition means building habit patterns.
 - Correct habit patterns usually lead to success.
 - Have the students repeat the task as often as needed to attain the necessary skill.
 The number of repetitions is determined by their abilities.
 - Recognize that individuals vary as to their quickness in learning. Slow students need more repetition as much as persons weak in coordination skills.
 - It is desirable to have students perform on a periodic basis to retain skill level and understand priorities.

Teaching Aids

- Teaching aids are devices the successful teacher uses to help avoid too much "telling". "Telling" is not all of teaching.
- They assist by complementing and improving instruction.
- They add color and variety, thus creating interest on the part of the student, and they allow the instructor to provide additional avenues for learning.
- They appeal to as many senses as possible, repeating facts in various ways, and are most effective in the introduction and presentation steps of teaching.
- Their use can vary lesson presentations to avoid monotony, add opportunities for student participation, and reduce the tendency to depend on words to carry ideas.
- They can include:
 - Display aids (on chalk and/or dry eraser boards, bulletin boards, or charts)
 - Large enough for all to see.
 - Diagrams or pictures can show details clearly.
 - Duplicated aids (notebook size)
 - Each student can have a copy.
 - Includes instruction sheets, diagrams, illustrations, or other information useful now and later to the student.

- Projected aids (movies, slides, videos, overheads, LCD projectors, or computer generated presentations)
 - These aids do not replace the instructor's own efforts.
 - Use them to best advantage, not as fillers or entertainment.
 - Prepare students in advance to observe the important points of projected aids.
- Three-dimensional aids (actual parts, mockups, models)
 - Overcome the difficulty of depicting objects on a flat (2-dimensional) surface.
 - Allow for movement during explanation.
 - Reduce unmanageable large objects to easily handled size.
- · Characteristics of a good visual aid
 - It should explain an abstract idea, show a relationship, or present a sequence or procedure that cannot be clarified without it.
 - It should be large enough to be clearly visible to everybody in the group; an aid is not an aid if part of the group cannot see it.
 - It should have lettering large and bold enough to avoid eyestrain from any point in the room.
 Avoid decoration and prevent distraction.
 - It should have easy wording for the students to understand; terms should be acceptable and in common use in the occupation itself.

- It should have bright colors to accentuate the important parts.
- It should be made to scale, whether reduced or enlarged; the essential parts should be in proper proportions, otherwise, the student may be confused.
- It should show evidence of good workmanship and be carefully finished in good taste.
- It should be portable to permit its use in more than one location.
- It should be protected with paint, shellac, glass, cellophane, or other protective materials.
- Teaching aid suggestions for driver awareness:
 - Projection aids (LCD projector, video, computer generated presentation) on any related subject
 - Videotape introduction or portion by department head.
 - · Slide presentation of traffic accidents
 - Overhead projection and grease pencil
 - · Charts, flip charts, graphs
 - · Chalk or dry eraser boards
 - Photographs
 - Handouts
 - Cartoons
 - Models
 - · Steering simulator

- · Bulletin board
- How to use the chalk or dry eraser board:
 - Make it as simple and brief as possible; copying lengthy outlines or lists is a waste of time (consider a duplicated handout in those situations).
 - Draw or write quickly, group interest will be lacking if too much time is used (consider appropriate abbreviations).
 - Write, print, or draw legibly.
 - Allow sufficient time for group to copy, if notes are worth taking, they should be taken accurately.
 - Try out board work in advance to avoid crowding or out-of-proportion sketches.
 - Plan a logical relationship of material for ease of student understanding.
 - Don't crowd the board, a few important points make a vivid impression.
 - Make the material simple, brief and concise.
 - Gather everything you need before the group meets--chalk, marker, ruler, eraser, etc.
 - Check lighting to avoid board glare.
 - Use colored chalk or markers for emphasis.
 - Print all captions and drawings on a large scale, to be clearly visible.
 - Erase all unrelated material since other work on the board distracts attention.

- Keep the board clean; a dirty board has the same effect as a dirty window.
- Prepare complicated board layouts before class.
- Avoid talking to the board, it makes it difficult for the group to hear.
- Don't stand in front of the board.
- · If the material is complicated, use a pointer.

The Use of Senses in Learning

- As learning is acquired, take full advantage of all appropriate senses in facilitating learning.
- We are told that we retain approximately:
 - 10 percent of what we read.
 - 20 percent of what we hear.
 - 30 percent of what we see.
 - 50 percent of what we see and hear.

These figures are only approximations, but they do suggest where emphasis in training should be placed.

- Research reveals that people learn faster by seeing and hearing than by hearing alone.
- People learn even faster when doing is added to seeing and hearing; the doing makes learning permanent.
- People tend to remember more of what they did in training rather than what they were told in training.

The Use of Senses in Learning (continued)

- People should be trained for positions under conditions that are as realistic as possible.
- The five senses are: sight, hearing, touch, taste, and smell (of which the first three are the most appropriate in the Driver Awareness Course).

Sight

- The most important sense, as much as 87% of all we learn comes through involvement of sight.
- Visualize teaching to stimulate learning by use of teaching aids and proper presentation techniques.

Hearing

- Lecturing is the usual classroom teaching procedure, but not the best for all purposes.
- There are also other ways of learning through sound.
- Learn by visualizing upon hearing experiences of others.

Touch

- Relates to the student experiencing how the vehicle handles during driving exercises.
- Relates to accuracy and motor skill/eyemuscle coordination.

How to Prepare to Teach a Task

- Make a simple analysis of the task
 - List operations in a STEP-BY-STEP method showing things to DO and things to KNOW.
 - Make analysis while doing task.
- Plan the lesson considering how much can be comprehended by the students.
- Have available all the tools, equipment, supplies and materials that are needed.

Preparation of a Written Teaching Outline

- Parts of an outline include:
 - Introduction
 - Let them know what the subject matter will be.
 - The purpose is to gain attention, motivate and state goals and objectives.
 - · Body
 - Expand the goals and objectives with specific details.
 - Organize in logical order.
 - · Limit to basic ideas.
 - · Summary
 - Summarize presented material.
 - Motivate students and re-emphasize main ideas.

Preparation of a Written Teaching Outline (continued)

- Be brief and to the point.
- Do not add new material.
- Do not pre-announce a summary (if you do, it may cause a loss of attention by the students).
- Allow a question and answer period.

Final Preparation before Conducting a Lesson

- · Secure training aids and facilities.
- Rehearse the lesson:
 - · Be complete in every aspect.
 - If training aids are to be used, use them.
 - Check the timing.
 - Before an audience, if possible.
 - · Before each class.
- Reasons for preparing:
 - Selection of proper material.
 - Keeps the instructor goal oriented.
 - Ensures proper sequence of events.
 - Refreshes instructor's memory, creates self-confidence and prevents duplication.
 - Use of written material (lesson plan/course outline) leads to standardization, ensures coverage and is a guide for substitute instructor.

INSTRUCTOR'S NOTE:

See Addendum #6: Lesson plans for detailed discussion of preparing a lesson plan.

Presentation Techniques

- Logical organization
- Use voice inflection, avoid monotone
- Use hand gestures
- · Be heard by all
- · Talk, don't read
- Make three second eye contact with students
- · Move about, don't stand still
- Face the class to speak
- · Use visual aids

Attitude and Performance

- The tone of class behavior is set in the first few minutes of an instructor's presentation.
- The attitude of the students is a direct reflection of the attitude of the instructor.
- When students know each other, they are less likely to pay attention. Appropriate control of students' behavior should be considered before and during training since most driver awareness courses are conducted in departments where students know each other.
- There will be a tendency toward more competition in driving within such groups, which may lead to increased speeds and loss of proper use of techniques and smoothness.
 - Competition and/or concern for "being on the clock" lead to a breakdown in quality of performance.

Attitude and Performance (continued)

- This quality breakdown is similar to the stress of real life driving situations encountered while responding to law enforcement requests for service.
- It is recommended that students <u>not</u> be placed in timed driving exercises, to allow for emphasis on use of safe and proper techniques.
 - Encourage students to incorporate proper techniques in day-to-day driving to develop good driving habits.
 - Once proper techniques have been fully understood and mastered, use of approved methods will more likely be used in later stressful situations.

Some Important Factors in Learning Differences in Individuals

1. Interest

Instruction becomes futile without student interest. Students learn well those things in which they have a vital, sustained interest. On the other hand, a bored student ceases to learn when there is no perceived personal benefit from the lesson.

2. Intelligence

Briefly stated, intelligence is the ability to respond quickly and successfully to new or unusual situations. The student can associate new ideas with experiences and knowledge.

3. Past Experiences

Background experiences form a basis for receiving additional knowledge.

Some Important Factors in Learning Differences in Individuals (continued)

4. Concentration

It is difficult to fix attention on one idea for very long, and the mind may wander. The individual who has the ability to remain focused over a period of time possesses the "power of concentration".

5. Memory

A person's ability to remember is extremely important in learning. Factors which influence memory are vividness, uniqueness and repetition.

6. Well-Being

Mental and physical comfort increase one's power of concentration. Instructors should try to put their groups at ease and in a positive frame of mind before presenting the lesson.

7. Self-Confidence

Individuals develop confidence as they learn. Fear of bodily injury, fear of failure, fear of criticism and humiliation make learning difficult, if not impossible. The good trainer never purposely says or does anything that would tend to make students lose their self-confidence.

8. Imagination

Imagination is the power to form mental pictures of things not present.

Complimenting and Correcting Students

A sincere compliment can help make learning more effective. Correction, on the other hand, can block progress if it is not done properly.

These suggestions will help the instructor handle both corrections and compliments.

- Avoid criticism. Nobody likes criticism, and most individuals want to learn. Therefore, avoid demeaning criticism for having done something wrong. Instead, emphasize how it could have been done better.
- If possible, compliment individuals before you correct them. Make sure it is sincere.
- If possible, let trainees critique themselves. When trainees correct themselves, they eliminate most unpleasantness. First compliment, then ask trainees if they can think of ways they could have performed better. If they can't think of anything, you should make suggestions.
- Don't overdo correcting. Good instructors exercise restraint when correcting. They know that if they correct everything an individual does wrong, the individual becomes nervous and self-confidence becomes damaged.
- When possible, avoid correcting in front of others. This may be embarrassing and demoralizing.
- Don't be too quick to blame trainees. If they don't do something right, the fault may lie in your teaching methods.
- Encourage the trainee. Compliments are an essential part of teaching. Space compliments so they can serve as steady support for the trainee's morale. There should be a good basis for all compliments.

Complimenting and Correcting Students (continued)

Topics for Lecture Presentation

- Improvement or progress, though slight, is a basis for a sincere compliment.
- Be prompt with your compliments or corrections.
 Make them immediately following the trainee's performance.
- The student instructors will lecture to the class on one of the following topics. The lecture will be ten to fifteen minutes and will combine information from the <u>Driver Awareness Instructor Course</u> manual, personal experiences and knowledge. At the end of the oral presentation, a pencil outline will be submitted based on the lecture. Instructors assign topics on the first day of the course and student instructors present them on the third day.
- Seat Belts
- Collision Avoidance: definition of defensive driving, classification of traffic collisions, space cushion
- Vehicle Dynamics: rear-wheel cheat, front-end swing
- Defensive Driving: driving skills, psychological factors
- Special Conditions: driving in the rain, hydroplaning, directional stability
- Defensive Driving: driver attitude, vehicle abuse
- Oversteer/Understeer
- Defensive Driving: physiological factors
- Special Conditions: grades, night driving, wheel off road, blowout

Topics for Lecture Presentation (continued)

- Describe Turnaround Exercise (use visual aids)
- Pre-Shift Vehicle Inspection: outside the vehicle
- Describe Offset Lane Exercise (use visual aids)
- Collision Avoidance: intersections, vehicle stops, backing
- Describe "T" Driveway Exercise (use visual aids)
- Vehicle Dynamics: left foot braking, wet brakes, skids
- Pre-Shift Vehicle Inspection: inside vehicle, leaving the station
- · Special Conditions: snow and ice, reduced visibility
- Instruct the class on civil liabilities, topics of your choice from the manual
- Collision Avoidance: lane changes, use of horn, headlights
- Special Conditions: stuck throttle, hood released, animals on road, engine failure
- Safely clearing intersections while Code-3, lane-bylane.
- Describe Parallel Parking Exercise (use visual aids)

Chapter Three

basic driving principles

Basic Driving Principles

The following teaching outline should be used for the purpose of presenting the lecture on Basic Driving Principles for the Driver Awareness Course. Additional information is available in the Addendums of this manual for instructor reference.

Weight Transfer

- On a stationary vehicle, the vehicle's weight is distributed between the front and rear wheels.
- Due to engine placement, weight distribution is seldom equal. The engine location decides the location of the greater part of the weight distribution.
- Types of weight transfer
 - · Lateral: Side to side
 - Longitudinal: Front to rear/rear to front
- Lateral weight transfer is created when the vehicle is turned right or left from its course of travel.
- Causes of longitudinal weight transfer
 - Braking/rear to front
 - Accelerating/front to rear
 - Decelerating/rear to front

Weight Transfer (continued)

- Spring loading
 - A vehicle's weight is mainly supported by its springs (Approximately 80-90%).
 - Weight transfer causes compression of the vehicle's springs.
 - · Compression is "spring loading".
 - "Unloading" of springs occurs when compressed springs release to a neutral position.
 - Steering, throttle, or braking will influence weight transfer.
- Weight transfer can't be eliminated from a moving vehicle, but it can be minimized by good driving techniques and smooth operation.

Steering Control

- Driver Seating Position
 - Driver comfort.
 - Efficiency in vehicle control.
 - When properly seated, drivers should be able to extend their arms forward comfortably and have the wrists "break" over the top of the steering wheel.
 - Drivers should fasten safety belts and be at least 12" from the air bag.
 - Drivers should adjust rear and sideview mirrors.
- Adjustable Steering Wheels

Steering Control (continued)

Instructor's Note:

Ten and two o'clock may involve danger from air bag deployment.

- Most vehicles currently in use are equipped with adjustable steering wheels.
- While there is technically no "right" or "wrong" position, the driver should select a wheel position for comfort and steering efficiency, while not obstructing the view of the speedometer.
- Steering Method Two-Hand Shuffle Steering Technique
 - Hand positioning
 - Steering wheel is portrayed as a clock for hand position locations.
 - Hands are placed at nine and three o'clock positions (Optional: eight and four o'clock).
 - · Hands do not leave the steering wheel.
 - Both hands do an equal and like amount of work.
 - Keeping hands lower on wheel is more natural and comfortable, less strain in shoulder muscles.
 - Turning Maneuvers
 - Right hand operates right side of the steering wheel; left hand operates left side.
 - Neither hand crosses over the twelve o'clock nor under the six o'clock wheel position.
 - Push/pull technique shuffle steering wheel between hand.
 - Advantages of Two-Hand Shuffle Steering
 - Maximizes steering accuracy.

Steering Control (continued)

- Safer and more effective recovery from steering input.
- Maximum vehicle control by minimizing weight transfer.
- Prevents radio cord from wrapping around steering column.
- · Minimizes air bag deployment injury.
- One-hand Reverse Steering Technique
 - The body is rotated to the right while in the seated position.
 - The right hand and arm are placed on the passenger seat backrest for stability.
 - Vision is directed over the right shoulder to the rear.
 - The left hand is positioned on the steering wheel at the twelve o'clock position and does all the steering. Palming is necessary with this steering technique.
 - Pressing the left leg against the bottom of the steering wheel will help stabilize the wheel.
 - The left foot is braced on the floorboard to provide driver stability and increased body elevation for better rear vision.
- Two-Hand Reverse Steering Technique
 - Body Positioning
 - The body is rotated to the right while in the seated position.
 - Right shoulder is pressed into the back of the seat.

Steering Control (continued)

- Vision is directed over the right shoulder to the rear.
- The left foot is braced on the floorboard to provide driver stability and increased body elevation for better rear vision.
- Do not rely solely on vehicle's mirrors for viewing while driving in reverse.

Hand Positioning

- · Left hand at twelve o'clock position.
- Right hand at five o'clock position.

Steering technique

- Left hand does all the steering, utilizing that portion of the wheel between the nine and three o'clock positions.
- The right hand serves merely as a "brake," grasping the wheel when it becomes necessary to reposition the left hand.
- Controlled Speed Backing The steering wheel is firmly held with the right arm positioned tightly against the body for added stability.
- Low Speed Backing The steering wheel is held with a relaxed grip. The wheel is passed readily through the right hand.

Throttle Control

Application

- Full throttle Total depression of accelerator pedal regardless of end result of speed.
- Maximum throttle That amount of throttle necessary to obtain and maintain desired speed.

Throttle Control (continued)

- Maximum acceleration Accelerating as quickly as possible to full throttle without losing traction, primarily when exiting a turn.
- Control
 - Smoothness in operation.
 - Definite and immediate affect on vehicle weight transfer.
- Affect on road position in turning maneuvers
 - Increased throttle will widen the arc of a turn driving line.
 - Decrease of throttle will tighten the arc of the driving line in a turn.

Speed Judgment

- The ability of a driver to estimate a safe vehicular speed for any given driving situation. Considerations regarding speed judgment include:
 - Road conditions
 - Type of driving maneuvers
 - Driver limitations
 - Vehicle limitations
 - Weather conditions
- Closure Rate Being able to judge the proper rate of deceleration necessary to negotiate a curve, avoid a hazard, or stop.

Brake Application

- · Types of braking
 - · Normal brake application
 - Light application at first
 - · Gradual increase in pressure on brake pedal
 - Ultimate stop or speed reduction
 - Panic-stop method
 - · Four-wheel locked skid
 - Maximum brake pressure
 - Loss of steering ability
 - Anti-Lock Brake System (ABS)
 - Prevents brake lockup
 - Allows directional control (steering) under maximum brake application
 - Dips and bumps may affect ABS activation
 - ABS produces a pulsation of the brake pedal and an unusual noise
 - In the event of ABS failure the normal braking system continues to operate
 - Left foot braking
 - Not acceptable
 - Tendency to "ride" brake pedal which generates heat to brake system
 - Generally unsafe (defensive driving)
 - Threshold Braking (Ten Scale)

Brake Application (continued)

- The maximum amount of brake pedal pressure just short of locking the brakes.
- Advantages
 - · Quicker speed reduction
 - More "cooling" time for brakes between application
 - Allows speed to be maintained for longer distance before brake application
 - · Steering always available
- 0-10 Scale of Firmness
 - \cdot 0 = No braking
 - 9 = Threshold braking
 - 10 = Four-wheel locked skid
- Proper scale braking technique: 7-8-9 on scale

Roadway Position

- Definition: "The position of the vehicle on the roadway that maximizes speed with minimum steering and risk of loss of vehicle control while negotiating a turn." (Also known as driving line)
- Driving advantages
 - Minimize and control weight transfer
 - Minimize steering input
 - Smoother vehicle operation
 - Maximum speed through turns in the safest manner

Roadway Position (continued)

Vehicle dynamics

- Centrifugal force: The force on a body in a curved motion that is directed away from the axis of rotation. A force which acts or impels an object away from the center of rotation.
- Centripetal force: The force on a body in a curved motion that is directed toward the center axis of rotation. The force required to keep a moving mass in a circular path. A force which acts or impels an object toward a center of rotation.
- Friction: Resistance to any force trying to produce motion; constantly present and always working opposite the direction in which an object is being moved. A force of resistance acting on a body which prevents or inhibits any possible slipping of the body.
- Traction: Friction adhesion between the tire and the road surface.
- Understeer: Reduction of traction of the front tires tends to force the vehicle to continue in a straight line with lessening of directional steering control (usually induced by excessive speed).
- Oversteer: Reduction of traction to the rear tires during a steering movement causes the rear of the vehicle to slide to the outside.
 - Can be caused by excessive speed or acceleration
 - Can be caused by excessive braking too far into a turn
 - Weight transfer to outside of turn and front of vehicle at same time.

Roadway Position (continued)

- Less weight on rear tire(s) means less traction.
- Driving points of a single turn
 - Entry (Point #1)
 - Portion of roadway where steering wheel is actually turned to start the vehicle into the turn.
 - Outside edge of available roadway.
 - Geometric apex (Point #2)
 - The innermost/tightest part of the turn.
 - Exit (Point #3)
 - Position at outside edge of roadway or available area where the turning maneuver is completed.
 - Generally, steering is returned to straight and weight transfer to neutral.

Chapter Four

practical application of driving problems

Practical Application of Driving Exercises

The goal of this training program is to expose the student to specific driving situations. This will require utilization of the basic driving principles to properly and safely operate a motor vehicle. The instructor will provide training in the five core exercises or their alternatives as designated below. One exercise from each of the following must be selected, for a minimum of five exercises:

- Offset Lane Exercise (Mandatory)
- Turn-Around Maneuver Exercise or Bootleg Turn Exercise (Select one)
- Steering Course Exercise, Chicane Exercise or Vehicle Control Techniques Course (Select one)
- "T" Driveway, Angled Driveway or "Y" Driveway (Select one)
- Parallel Parking Right side or left side (Select one)

Introduction First Phase

EVOC Staff Demonstration

- Exercises—Students observe staff drive and engage in-depth discussion of driving exercises.
- Students walk through each of the five selected driving exercises.

Second Phase

Students participate as drivers and rotate through each of the five driving exercises.

- Instruction is presented by the EVOC Staff.
- Students must demonstrate proficiency before continuing to next phase. The EVOC Staff will grade and discuss performance with the students.

Third Phase

Students will participate as drivers and instructors on each exercise.

- Rotate roles as student and instructor with feedback provided by EVOC Staff for both driving and evaluating.
- Student will learn to identify potential problems of a driver.
- Students are given an opportunity to observe others and practice presenting and evaluating through the use of a rating sheet.

Fourth Phase

Student will present driving problems to fellow students in same manner as will later be given to their students of eight-hour Driver Awareness Course.

- Rotate roles as oral presenter and driving demonstrator.
- Feedback and grading will be provided by the EVOC Staff for both driving and oral presentation.
- Students are given an opportunity to observe others and evaluate performance.

Offset Lane Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- · One law enforcement training vehicle.
- Twenty-four 18" traffic cones and ten 48" delineators.

Goal

The student will gain the necessary skill and knowledge to control a vehicle while negotiating turning movements when driving forward or backward, under restricted road conditions.

Objectives

- The student will drive a vehicle forward and backward through an offset lane representing impaired conditions, utilizing proper roadway positioning.
- While driving through an offset lane exercise in either direction, the student will demonstrate proper seating position.
- While driving through an offset lane exercise in either direction, the student will demonstrate proper steering techniques.

Introduction

 Emergency vehicle drivers are often required to execute precise turning movements while driving forward or backward. These turning movements may be necessary under restricted conditions.

Introduction (continued)

- The offset lane is designed to simulate some of the following:
 - · Lane changes in heavy traffic.
 - · Emergency lane changes.
 - Backing in parking lots or between buildings.
 - Maneuvering through congested areas, i.e., alleys, driveways, dead end streets, etc.
- The driver must be aware of the vehicle's dimensions.
 - Assists in determining the proper positioning of a vehicle on a roadway in a confined area.
 - Assists the driver in correctly determining the vehicle's position in relationship with the roadway and surrounding environment.
 - Distances between the front and rear bumpers and obstacles must be known when moving in restricted clearance.
 - Distances between the sides of the vehicle and any other obstacles must be of constant concern.
- Location of the wheels and the direction in which the front wheels are pointed is imperative.
 - The wheels of a vehicle are not on the four corners of the vehicle.
 - There is a definite front and rear chassis "overhang" which must be accounted for when turning.
- When driving forward and approaching an impaired clearance area, a driver must <u>first</u> estimate the width of the area to be traversed. It must be remembered

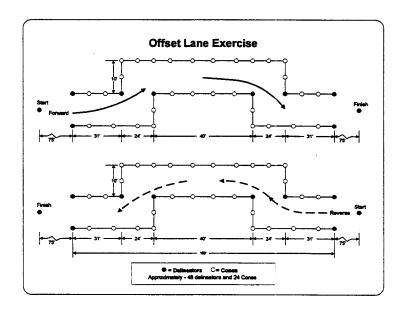
Introduction (continued)

that the average law enforcement vehicle is approximately six feet wide.

- The driver must determine that the vehicle can safely pass through this area.
- If not absolutely sure--stop the vehicle!
- Depth perception and visual awareness are important.

Course Description

- The course is on a level paved area 300 feet in length and 20 feet in width.
- The lane is 150 feet long with a starting and stopping area of 25 to 75 feet at each end.
- The lane is 10 feet in width, with a 10-foot offset section that is 88 feet in length. The openings of the offset portion are 24 feet in length.



- Delineators and cones are used to outline the course. An optional approach would be to use painted traffic lines to outline the course.
- A delineator will be located to the rear of the forward starting position and another to the front of the finish of the forward driving position.

Procedure to Drive Course

- This exercise is divided into two phases
 - Driving forward.
 - · Driving backward.
- Start in front of the starting delineator with the driver's seat and seat belt properly adjusted.
 Emphasis should be placed on students using the least amount of steering input, which will minimize rear wheel cheat, weight transfer and front-end swing.
- Driving Forward
 - Move forward, smoothly and quickly accelerating to approximately 15 mph and maintain speed.
 - Enter the lane on the extreme right hand side of the roadway to enter a left turn.
 - Stay to the right until approximately 18 feet into the lane.
 - A left turning movement is then made, directing the vehicle into the first opening and toward the offset portion.
 - The vehicle should be driven as close as possible to the left delineator at the opening.
 - As the vehicle enters the offset portion, the steering wheel is gradually turned to the right, making a transition from the initial left turning movement to a right turning movement.
- As the vehicle exits the first opening, steer to the left side of the offset lane.
 - Minimizes weight transfer.

Instructor's Note:

Emphasize road position, i.e., utilizing all of the available roadway to straighten out the turn. Drive through the turn, instead of around it.

- Places vehicle in proper road position for the next running movement.
- The vehicle will continue in the right turning movement until it enters into the second opening.
 - The amount of steering should remain constant from the first opening to the second opening.
 - Allow for a smooth <u>continuous</u> right turning movement.
- As the vehicle re-enters the original lane of travel, the steering wheel is smoothly turned to the left, keeping the vehicle as close as possible to the left delineator at the opening.
- The vehicle will exit the second opening and continue moving to the right perimeter of the course.
 - Minimizes weight transfer.
 - Places vehicle in proper road position to exit the course
- As the vehicle is straightened out, it will remain on the extreme right side of the lane as it passes out of the exercise.
- Deceleration is not to occur until the vehicle is completely out of the laned area.
- The vehicle continues to the end of the course, stopping at the finish cone by utilizing the proper braking technique (7-8-9).
- Driving Backward
 - The gear selector is placed into "reverse."

Instructor's Note:

Emphasize late steering problems, as they may occur at this point. When a vehicle moves in reverse, the wheels that do the turning are "following" the driver. The rear wheels must be "pointed" by proper use of the front wheels. Steering control is not maintained at the "leading" end of the vehicle, because the rear wheels cannot be turned.

- Visual awareness to the rear will be obtained by properly turning to the right in the seat and directing vision through the rear window.
- The vehicle will move back, entering the lane with a road position that will allow for front end swing.
- The vehicle will enter the lane at just above an idle speed.
- As the vehicle enters the lane, a slight left turning movement (right as viewed by driver) is initiated, "pointing" the vehicle toward the first opening.
- As the vehicle enters the opening, the right delineator (left to driver) at the opening is used as a guide, and the steering wheel is smoothly turned to the right.
- The vehicle passes as close as possible to the delineator during this transition from the left turning movement into a right turning movement.
- As the vehicle exits the first opening, steer to the left side (driver's right) of the offset lane.
 - Minimizes weight transfer.
 - Places vehicle in proper road position for the next turning movement.
- The vehicle will <u>continue</u> in the right turning movement until it is pointed toward the second opening.
- The amount of steering should remain constant from the first opening to the second opening, allowing for a smooth <u>continuous</u> turning movement.

- As the vehicle enters the second opening, the right marker flag or delineator at the opening is used as a guide, and the steering wheel is smoothly turned to the left.
- The vehicle will pass as close as possible to this marker/delineator during the transition from right to left turning movement.
- The vehicle will exit the second opening and continue toward the right perimeter of the course.
 - Minimizes weight transfer.
 - Places vehicle in proper road position to exit the lane.
- If the vehicle is straightened it will remain on the extreme right side of the lane as it passes out of the exercise.
- Deceleration does not occur until the vehicle is completely out of the laned area.
- The vehicle continues to the end of the course, stopping prior to the starting delineator.
- Visual awareness to rear will be maintained until the vehicle comes to a complete stop.

Demonstration Phase

- The instructor will demonstrate the proper seating and accepted hand positioning for both forward and reverse driving.
 - Forward
 - Left foot is flat on the floor and leg is braced against the door.
 - Ball of the right foot is on the accelerator pedal with the heel on the floor.

Demonstration Phase (continued)

- Sitting straight in the seat with hips against the seat back rest.
- Hands comfortably placed on each side of the steering wheel (not top or bottom).

Reverse

- Use one of the approved reverse steering methods.
- The left leg and foot will brace the body in this position.
- Proper utilization of the seat belt will be demonstrated.
- Visual awareness to rear while backing will be emphasized until vehicle comes to a full stop.
- An instructor <u>slowly</u> demonstrates both directions of the "offset lane" exercise.
- The first demonstration is done at slow speed so that each maneuver and technique can be discussed.
- A second demonstration consists of driving the course at normal training speeds.

Practical Application Phase

- Each student will complete both directions of the "offset lane" exercise.
- The student will conform to all objectives and techniques presented.

Evaluation Phase

Student will be evaluated on practical application performance in both forward and reverse movements in the following areas:

- Steering control
- Throttle control
- Speed control
- · Rear wheel cheat
- Front-end swing
- Brake application
- · Visual awareness of obstacles to rear
- Smoothness and coordination
- Use of road position

Turn-Around Maneuver Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials
Needed

- One law enforcement training vehicle.
- Thirty 18" traffic cones and sixteen 48" delineators.

Goal

The student will gain the necessary skill for maintaining maximum safe vehicle control while performing quick turn-around maneuvers.

Objectives

- The student will demonstrate three basic ways (Three-Point Turnaround, Modified Bootleg, Bootleg) to turn a vehicle so as to proceed in the opposite direction quickly and safely.
- While backing, the student will demonstrate maintaining constant visual awareness of objects to the rear and sides until the vehicle comes to a complete stop.
- The student will demonstrate reverse steering (sometimes referred to as "reverse rolling friction") technique.

Introduction

 Drivers of emergency vehicles are often required to execute quick turn-around maneuvers to change the direction of travel of their vehicles. These turnaround maneuvers may be necessary when:

Introduction (continued)

Instructor's Note:

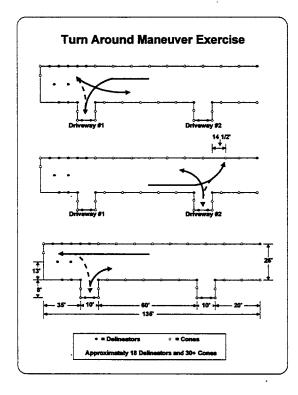
Emphasize that a large number of preventable traffic collisions occur when vehicles are backing under ten mph.

- A suspect vehicle is observed traveling in the opposite direction.
- An emergency call is received which is in the opposite direction.
- The driver observes an incident requiring investigation and must turn around to return to the location.
- Turning movements should never be made until a driver has a total view of the surrounding environment.
 - Oncoming traffic speed.
 - · Use mirrors to check for following vehicles.
 - Look over shoulder(s) to check blind spot(s).
 - Sidewalks pedestrians and bicycles.
 - Parked cars, etc.

Course Description

- The course consists of three basic turning movements, referred to as:
 - "Three-point" turn-around.
 - "Modified boot leg" turn-around.
 - "Boot leg" turn-around.

Course Description (continued)



- The course is on a level, paved area 135 feet in length and 34 feet in width.
 - Traffic cones lay out a road 26 feet in width and 135 feet in length with two driveway aprons.
 - The two driveway aprons are on the same side of the road, 10 feet wide, 8 feet deep, and 60 feet apart.
 - This simulates a normal residential street with narrow driveways.

Procedure to Drive Course

- In preparation for the exercise the vehicle will:
 - From outside the course, enter the roadway along the right side and on the roadside opposite the two driveways.
 - Have the seat and seat belt properly adjusted.
- The vehicle will move forward, staying as close to the right hand side of the street as possible, and reducing speed by braking prior to any turning.
- When the front bumper is opposite the leading edge of the first driveway a left turning movement into that driveway will be made.

- The vehicle will enter the driveway perpendicular to the street and as far to the right as possible.
- The vehicle is stopped prior to hitting any of the traffic cones or flags that outline the driveway, with its front wheels straight.
- Before initiating backing, look to rear and down the roadway in each direction to ensure that it is hazard free.
- The vehicle will be placed in reverse and backed out of the driveway.
 - While backing, the steering wheel will be turned slightly to the right so that the front end of the vehicle moves to the left.
 - Visual awareness forward until the vehicle, particularly the left front fender, is clear of all objects and out of the driveway.
- Upon exiting the driveway, the steering wheel is quickly turned to its full radius to the right.
 - Maintain visual awareness over the right shoulder and through the rear window until the vehicle is completely stopped.
 - Prior to completing the backing movement and while the wheels are still rolling, the steering wheel will be turned in the opposite direction until the front wheels are pointed in the next direction of travel.
 - The vehicle proceeds to the extreme perimeter of the course (far side of road) and is stopped prior to hitting the marker flags or cones.
- The vehicle then moves forward as the steering wheel is turned to the left to avoid striking the cones along the perimeter of the course. This completes the "three-point" turn-around.

Instructor's Note:

Explain the need for the input of steering while moving and the problems encountered when not used, i.e., loss of time to turn wheels after stopped; tire damage/wear while turned in stationary position; excessive wear to steering gear.

- The vehicle will continue toward the second driveway, keeping close to its right side curb line traffic cones.
 - This places the vehicle in a position to execute the next turn-around: "Modified bootleg."
 - When the vehicle's front bumper is approximately even with the leading edge of the opening of the driveway, the steering wheel will be turned sharply to the left.
 - The vehicle is stopped on the opposite side of the street and at a 45-degree angle to the opening of the driveway.
 - Vision to the rear is directed over the right shoulder and through the rear window; the vehicle is backed into the driveway, as straight as possible, and vision is to <u>remain</u> to the rear until the vehicle is <u>fully</u> stopped.
 - Prior to completing the backing movement, steer so that the vehicle's front wheels will be pointed in the next direction of travel.
 - The vehicle will then move forward as the steering wheel is turned to the left to avoid striking cones along the outside perimeter (vehicle's right) of the road.
- The vehicle continues on the right side of the roadway, 20 to 30 feet past the first driveway and then stops.
 - The vehicle should be positioned closer to the center line than the right hand curb line. Thus, when the left backing motion is made, the front of the vehicle will not swing out and hit the perimeter cones.

Instructor's Note:

Explain that the driver will look over the <u>left</u> shoulder when making this <u>left</u> hand backing movement. This will give the best visibility to the rear, as well as observing any oncoming traffic. Explain front-end swing.

- Vision towards the driveway is secured by looking over the <u>left</u> shoulder.
- The vehicle is moved in reverse and the steering wheel is then turned to the left.
- As the vehicle backs into the driveway, vision remains to the rear until the vehicle is completely stopped.
 - Again, the vehicle should be positioned in the driveway as straight as possible, using the total available depth.
 - Prior to completing backing movement, steer for the next forward movement.
- The vehicle will then move forward and the steering wheel will be turned to the right to avoid striking cones along the perimeter of the course.
- · This completes the "Bootleg" turn-around.

Demonstration Phase

- An instructor <u>slowly</u> drives and demonstrates the three types of turn-around maneuvers.
- The demonstration is done at slow speeds so that each maneuver and technique can be discussed.
- A second demonstration consists of driving the course at <u>normal</u> training speeds.
- All the techniques discussed in the slow demonstration will be used.

Practical Application Phase

- The techniques and objectives presented will be demonstrated by the student.
- The student practices proper utilization of the vehicle control techniques.
- The student should perform the exercise as many times as necessary to accomplish proficiency.

Evaluation Phase

Students should be rated on their performance in the following areas:

- Steering forward
- Steer while the tires are rolling
- Use of road position
- · Brake application
- Front-end swing
- · Rear wheel cheat
- · Speed control
- Visual awareness of obstacles to rear
- Smoothness and coordination

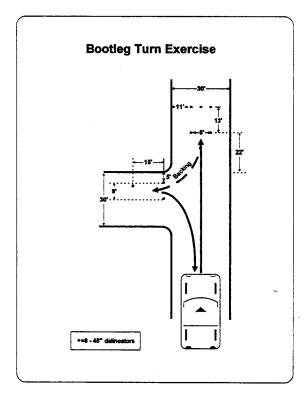
Bootleg Turn Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed	 One law enforcement training vehicle. Eight 48" delineators.
Goal	To acquaint the student with the proper techniques and inherent hazards of a backing turn (boot-leg) maneuver.
Objectives	To strongly emphasize vehicle control when driving in reverse.
	 To stress the importance of visual awareness of obstacles around and behind the moving vehicle.
	 To acquaint the student with the mechanics of "front- end swing."
	 To exercise skill and judgment while maneuvering a vehicle in a limited area.
Introduction	Drivers of emergency vehicles are frequently required to make turn-around maneuvers.
	 Students are informed that a large percentage of traffic collisions occur under 10 MPH while backing.

Course Description

• The course consists of two "driveways" set at right angles to each other.



- The driveway dimensions are 13' x 8' and 15' x 9' and are marked by traffic delineators.
- Sufficient room (27') is allowed between the driveway openings to accommodate the dimension of the training vehicle.

Procedure to Drive Course

- The driver approaches the exercise driveways which are placed with an opening directly in front of the vehicle and another opening to the left or driver's side.
- The driver will pass the left side driveway and drive the vehicle into the driveway to the front of the vehicle.
- As the vehicle enters the driveway, it is placed to the extreme left hand (driver's) side, crowding but not contacting the boundary delineators.

- The vehicle is driven forward into the driveway as far as allowed and stopped.
- The vehicle is then placed in reverse while the driver glances to the rear to ensure the pathway is clear.
- As the vehicle is backed out of the driveway, a slight amount of steering input is applied to begin the turning movement into the other driveway.
- The driver's attention at this time is directed to the vehicle's right front to ensure clearance of obstacles, monitoring front-end swing.
- As the vehicle clears the driveway, the driver now looks over the right shoulder and directs attention rearward until the vehicle comes to a complete stop.
- The vehicle is backed straight into the second driveway as far as space allows.

Demonstration Phase

- An instructor will slowly drive the course emphasizing:
 - Obstacle collision safety
 - Smooth vehicle control techniques
 - Steer while moving
 - Proper visual direction
- Another instructor will verbalize the demonstration to the assembled students emphasizing pertinent points.

Practical Application Phase

The student driver will negotiate the course utilizing the instructed techniques.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- · Steering control
- · Collision avoidance
- · Visual awareness of obstacles to rear
- · Proper use of road position
- Brake application
- Throttle application

Steering Course (Forward and Reverse) Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Minimum of six 48" delineators.

Goal

The student will gain the necessary skill and knowledge to operate an emergency vehicle in both forward and reverse directions, using the proper steering methods for maximum vehicle control.

Objectives

- Given a steering course exercise, the student will demonstrate the proper application of the forward and reverse methods of steering.
- Given a steering course exercise, the student will demonstrate proper coordination of steering and throttle control to minimize weight transfer during turning movements.
- Given a steering course exercise, the student will safely maneuver around obstacles without striking them.

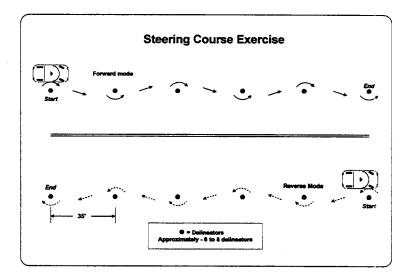
Introduction

 The steering course is designed to emphasize the importance of smoothness and coordination of steering and throttle control.

Introduction (continued)

 Looking ahead to prepare for any turning movement is essential for maximum vehicle control and safety.
 A preoccupied or inattentive driver will experience a delay in the perception of, and reaction to, hazardous situations on the roadway.

Course Description



- The course is 175
 feet in length and
 24 feet in width on
 a straight, level,
 paved surface.
- The course consists of a series of six delineators placed 35 feet apart in a straight line.

Procedure to Drive Course

- The course will be driven forward, then in reverse, with the driver properly seat belted. Emphasis should be placed on students using the least amount of steering input, which will minimize rear wheel cheat, weight transfer and front-end swing.
- Starting in the forward direction, the vehicle is driven at a speed of 5-10 mph, weaving in-and-out of the delineators, making a continuous series of "S" turns using the accepted steering method in conjunction with a smooth, steady throttle application.

- The vehicle's placement as it passes from one delineator to another should provide sufficient distance on the sides of the vehicle to avoid striking the delineators.
 - "Rear wheel cheat" is the tighter tracking of the rear wheels, as compared with the front wheels, in a turn. Allow for tighter turning of rear of the vehicle.
 - Judgment of distances can be more difficult on the right side of the vehicle, the side away from the driver.
- Once the vehicle has completed one pass in the forward direction, it will immediately be driven for one pass in reverse toward the original starting position, retracing the previous route.
 - The vehicle is driven at an idle speed, approximately 3-5 mph, while weaving in and out of the traffic delineators.
 - Proper hand positioning and body placement as described in the vehicle control techniques are extremely important to maximize vehicle control and rear vision.
 - The driver must also be careful not to steer too late in reverse, and allow sufficient distance between the vehicle and delineators.
 - Bring the vehicle to a complete stop, looking to the rear at all times.

Demonstration Phase

- An instructor will demonstrate proper steering for both forward and reverse.
- Smooth application of steering and throttle will be emphasized.

Practical Application Phase

- The student will drive through this serpentine course forward, backward and forward again providing an opportunity to practice the accepted steering methods and proper throttle control.
- Smoothness and proper distancing between vehicle and delineators will be demonstrated.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- · Steering control forward and reverse
- Rear wheel cheat
- Front-end swing
- · Speed control
- · Visual awareness of obstacles to rear
- Smoothness and coordination

Chicane Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Twenty 18" traffic cones and twenty 48" delineators.

Goal

The student will gain the necessary skill and knowledge to control a vehicle while negotiating turning movements when driving forward or backward, under restricted driving conditions.

Objectives

- The student will demonstrate the ability to safely and efficiently drive a vehicle forward and backward through impaired clearance areas, utilizing proper control techniques.
- The student will demonstrate the proper seating and steering techniques for driving a vehicle in either direction.
- The student will demonstrate proper coordination of steering and throttle to minimize weight transfer during turning movements.
- The student will successfully judge distances and safely maneuver in and out of obstacles without striking them with any part of the vehicle.

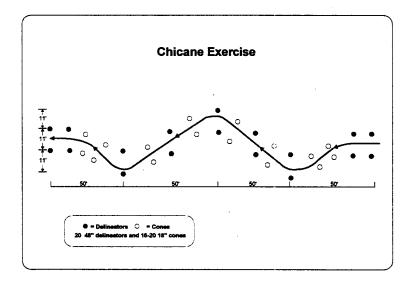
Introduction

- The chicane is designed to emphasize the importance of smoothness and coordination of steering and throttle control.
- Proper steering technique should be used while driving both forward and backward.
- Looking ahead in the direction of travel to prepare for any turning movement is essential for maximum vehicle control and safety.
- Emergency vehicle drivers are often required to execute precise turning movements while driving forward or while backing.
- The chicane is designed to simulate some of the following:
 - · Backing in parking lots or between buildings.
 - Maneuvering through congested areas, i.e., alleys, driveways, dead end streets, etc.
- In any driving situation, a good driver must know the vehicle's dimensions. This will assist in determining the proper positioning of a vehicle on a roadway in restricted driving conditions.

Course Description

- The course is on a level paved area 250 feet in length and 33 feet in width.
 - The chicane is 200 feet long with a starting and stopping area of 25 feet at each end.

Course Description (continued)



- The driving lane is 11 feet in width.
- Delineators and cones are used to outline the course.
- One delineator will be located at each of the far ends of the exercise to indicate starting and stopping positions.

Procedure to Drive Course

- The course will be driven forward, then in reverse, with the driver properly seat belted.
- Starting in the forward direction, the vehicle is driven at a speed of 5-10 MPH, weaving in and out of the delineators, making a continuous series of "S" turns using the two-handed steering method in conjunction with smooth, steady throttle application.
- The vehicle's placement as it passes from one side to another should provide sufficient distance on each side to avoid striking the delineators with any part of the vehicle.
 - "Rear wheel cheat" is the tighter tracking of the rear wheels, as compared with the front wheels, in a turn. Allow for tighter turning of rear of the vehicle.

- Judgement of distance can be more difficult on the right side of the vehicle; the side away from the driver.
- Once the vehicle has completed one pass in the forward direction, it will immediately be driven for one pass in reverse toward the original starting position, retracing the previous route.
 - The vehicle is driven at an idle speed, approximately 3-5 MPH, while weaving in and out of the delineators.
 - Proper hand positioning and body placement as described in the vehicle control techniques are extremely important to maximize vehicle control and rear vision.
 - The driver must also be careful not to steer too late in reverse and allow sufficient distance between the vehicle and delineators.
 - Bring the vehicle to a full stop, looking to the rear at all times.

Demonstration Phase

- An instructor will demonstrate proper steering technique for both forward and reverse while driving the course.
- Smooth application of steering and throttle will be emphasized.

Practical Application Phase

The student will drive the course in the prescribed manner utilizing the instructed control techniques.

Evaluation Phase

The student will be evaluated on the following areas of control techniques:

- Steering control forward and reverse
- · Rear wheel cheat
- Front end swing
- Speed control
- · Visual contact with obstacles to rear
- Smoothness and coordination

Vehicle Control Techniques Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Ten 28" cones.

Goal

The student will become familiar with all aspects of vehicle control techniques.

Objectives

The student will successfully demonstrate the following fundamental vehicle control techniques while negotiating the exercise:

- Steering
- Throttle application
- Braking
- · Roadway position
- · Weight transfer
- Speed judgment

Introduction

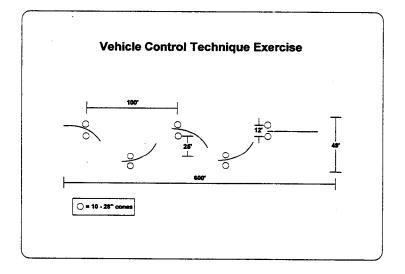
 Law enforcement drivers must be able to properly control their vehicles under emergency as well as routine conditions.

Introduction (continued)

- The course is designed to familiarize the student with the basic fundamentals of vehicle control under all conditions.
- An understanding of vehicle dynamics combined with accurate manipulation of the vehicle's controls are essential to safe vehicle operation.

Course Description

- The course occupies a level, paved, driving area 600' long and 70' wide.
- The course consists of five sets of cones, two per set, 12' apart.
- The first set of cones is placed 100' from the start of the exercise, with the remaining four sets at 100' intervals.



- The second and fourth sets of cones are offset 25' from the other sets of cones to constitute an "S" configured driving line.
- The remaining 100' of driving area is utilized for braking room.

Procedure to Drive Course

- The exercise is divided into a two-phase operation.
 In Phase One, the vehicle is driven forward through the course. In Phase Two the vehicle is driven in reverse back through the course.
- The vehicle is driven forward at a constant speed which will allow smooth vehicle operation.
- Vehicle control techniques stressed are:
 - Speed judgment
 - · Roadway position
 - Steering
 - · Weight transfer
 - Braking
 - Throttle application
- At the end of the driving area, the vehicle will be brought to a complete stop stressing firm to light brake application for controlled weight transfer.
- Assuming the proper seating position, the student will back the vehicle through the course utilizing the proper control techniques. Front-end swing, rear wheel cheat and the effects of caster while backing are explained to the student driver.

Demonstration Phase

- An instructor-driven vehicle will negotiate the course both in forward and reverse.
- The students will ride as passengers in the demonstration vehicle while the instructor drives and verbalizes the exercise.
- All pertinent vehicle control techniques will be stressed and demonstrated.

Demonstration Phase (continued)

• The demonstration will be driven once at slow speeds, then at training speeds.

Practical Application Phase

- Each student will perform the exercise, both forward and reverse.
- The student driver will confirm to all objectives and techniques presented.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- Speed judgment
- Brake application
- · Roadway position
- Throttle application
- Steering control
- Weight transfer

"T" Driveway Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Seventeen 18" traffic cones and nine 48" delineators.

Goal

The student will learn the basic movements of a vehicle while maneuvering back and forth and turning in and out of tight environmental situations.

Objectives

The student will successfully demonstrate how to properly and safely maneuver a vehicle in and out of a "T" shaped driveway or blocked "T" alleyway where there is a minimum of space.

Introduction

- A vehicle will often be placed in restricted area situations, and it is important to safely maneuver both in and out of such circumstances.
- This training will instill confidence in the driver through successful completion of the task.
- It is essential to reduce vehicle and property damage, as well as potential liability litigation.
- The following are terms and concepts which will instill a basic knowledge of movement of various areas of a vehicle during tight maneuvers.

Introduction (continued)

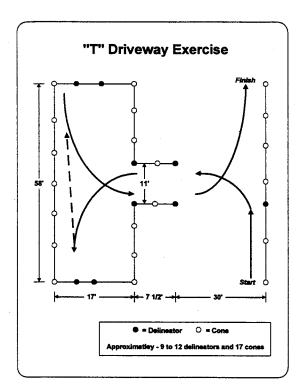
- Rear Wheel Cheat: The rear wheels track differently and tighter than the front wheels during steering movements.
- Front-end Swing: The front-end of the vehicle swings out during steering movements in reverse.
- Rear Vision: The critical importance of physically looking toward the rear of the vehicle while backing until the vehicle completely stops.
- Use of Mirrors: Normal vehicle mirrors are not of sufficient size or design to solely rely on for safe backing.
 - · Blind spots due to vehicle design
 - Curved mirror on passenger side distorts objects
- Road Position: Use of available roadway to fullest advantage; plan ahead in placing vehicle to ensure that once inside a driving problem it will properly and safely be able to exit.
- The student should learn to judge physical dimensions of a law enforcement vehicle.
 - Front-end push bars
 - Rear bumper
 - Right and left sides

Course Description

- The driving area should be on level pavement at least 58 feet wide and 54½ feet long (including width of approach road).
- The vehicle will enter the driveway area from a left turn maneuver from a roadway approximately 30 feet wide.

Course Description (continued)

- The dimensions of the driveway are:
 - 58 feet across the top of the "T."
 - 17 feet deep from the top of the "T" to the entrance.
 - The "mouth" or entrance of the "T" base will be 11 feet wide and 7 1/2 feet deep.



- The course will be outlined with cones, utilizing the large 48" delineators in the most critical areas.
 - The four corners of the "mouth."
 - Both ends of the top of the "T," two on each end.
 - The position on the roadway outside the T-Driveway that indicates the turning point for entering.
- The various dimensions may vary with the size and capabilities of the vehicle used.

Procedure to Drive Course

- The Approach
 - Road position on the approach road is critical before the left turning movement into the entrance of the driveway.
 - Look and plan ahead.

- For a left turn set up wide to right.
- Keep speed down to ensure safety and control.
 - Tight area to maneuver requires slower speeds.
 - Increased speed can increase the radius of the turn.
- Road position while in the entrance of the driveway is also important.
 - Set up by crowding wide to right for left turn into top of driveway.
 - This will compensate for rear wheel cheat in turn.
- Driving within the "T" Driveway.
 - Steering accuracy into top of the "T" from the entrance is important.
 - Avoid hitting delineators at entrance.
 - May require briefly straightening wheels in mouth of the "T."
 - Don't leave wheels straight too long to avoid hitting cones at the very top edge of the "T."
 - Judgment of front-end distance.
 - Leave sufficient room for front bumper and push bars at left end of top of the "T."
 - Straighten the vehicle's front wheels in the top of the "T" just prior to coming to a complete stop.
 - Backing within top of the "T."

Procedure to Drive Course (continued)

- Look to rear at all times while backing.
- Smoothly steer the vehicle right to crowd it into the corner of the opposite end, allowing for proper road position to set up to exit the mouth of the "T."
- The vehicle is stopped parallel with the top edge of the "T" with sufficient safe margin between rear bumper and right end of the "T."

• Exiting the "T."

- Steering accuracy is important to compensate for rear wheel cheat while exiting left through mouth of the "T."
 - Avoid being too tight to delineators on inside of left turn.
 - Avoid excessive throttle which could widen exit path into delineators on outside of turn.
- May require slight straightening of wheels just as the vehicle exits mouth of the "T," and then further left steering to enter the roadway.

Demonstration Phase

- The instructor slowly demonstrates the proper techniques described earlier.
- Emphasize smoothness, safety and road positioning.

Practical Application Phase

The techniques presented will be demonstrated by the student.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- Steering control
- Use of road position
- Rear wheel cheat
- · Front-end swing
- · Speed control
- Smoothness and coordination
- · Visual contact with obstacles to rear

Angled Driveway Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Eight 28" cones and ten 48" delineators.

Goal

The student, through instruction and practical application, will properly back a vehicle into a limited area while effecting direction changes.

Objectives

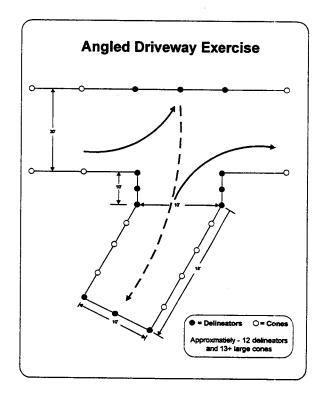
- The student will safely drive a vehicle in reverse in a limited maneuvering area.
- The student will be exposed to and compensate for a front-end swing situation.
- The student will recognize the importance of visual awareness of obstacles for purposes of collision avoidance.

Introduction

- During routine patrol situations, the driver is often required to maneuver a vehicle within limited areas, both forward and in reverse. A large percentage of traffic collisions and body damage to emergency vehicles occurs under these situations.
- This course is utilized to provide a situation in which the student driver can gain knowledge and expertise to contend with these circumstances.

Course Description

• The course represents a driveway perpendicular to a simulated city street, 30' wide.



- The driveway is 10' wide and 28' long, outlined in cones and delineators.
- The first ten feet of the driveway are straight, with the remaining eighteen feet angling off to the driver's side at approximately 35°.

Procedure to Drive Course

- The vehicle is driven down the simulated city street approaching the driveway, which is located to the passenger side.
- As the vehicle's front end nears the immediate corner
 of the driveway, the vehicle is driven into a hard lefthand turn and placed perpendicular to the roadway;
 ideally, the vehicle's trunk is lined up with the
 entrance to the driveway.
- The driver will now back the vehicle into the driveway, looking over the right shoulder the entire way.

Procedure to Drive Course (continued)

- The driver's side boundary cones are utilized as a reference for safe vehicle placement.
- The vehicle is backed in a straight line conforming to the driveway boundaries for the initial 10 feet.
- As the vehicle's rear bumper is adjacent to the point of angle, steering is input to continue the vehicle's rearward progress in conforming to the configuration of the driveway.
- As the vehicle is directed into the angled portion of the driveway, the steering is returned to neutral to prevent front-end swing from causing contact with the passenger side boundary cones.
- The vehicle is backed down the driveway as far as possible and brought to a complete stop.
- The vehicle is then driven forward out of the exercise.

Demonstration Phase

- An instructor will drive the course at a slow speed emphasizing vehicle placement, visual direction, steering control and collision avoidance.
- Another instructor will verbalize the demonstration to the assembled students.

Practical Application Phase

The student will drive the course in the prescribed manner utilizing the instructed control techniques.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- Use of road position
- · Visual awareness of obstacles to front and rear
- Steering control
- Front-end swing

"Y" Driveway Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials Needed

- One law enforcement training vehicle.
- Fourteen medium 18" cones and nine 48" delineators.

Goal

The student will learn through practical application the basic movements of a vehicle both forward and reverse in a tight environmental situation.

Objectives

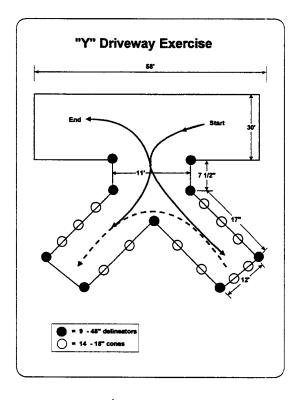
The student will successfully demonstrate how to properly maneuver a vehicle in and out of a "Y" shaped driveway or blocked "Y" alleyway where there is a minimum of space.

Introduction

- In law enforcement, a vehicle will often be driven in confined areas and it is important to safely maneuver during such circumstances.
- This training will instill confidence in the driver through successful completion of the task.
- It is essential to reduce vehicle and property damage.
- The student should learn to judge physical dimensions of a law enforcement vehicle.

Course Description

• The driving area should be on level pavement at least 58' wide and 58' long, including approach road.



Instructor's Note:

These dimensions are a guide and will vary with different size law enforcement vehicles

- The vehicle will enter the driveway area from a left turn maneuver from a roadway approximately 30' wide.
- The dimensions of the driveway are:
 - 58' across the top of the "Y."
 - 17' depth from the top of the "Y" to the entrance.
 - The mouth of the entrance of the "Y" base will be 11' wide and 7 1/2' deep.
 - The top portion of the "Y" or driveway portion will be 12' wide.
- The course will be outlined with 18" medium cones, utilizing the large 48" delineators in the most critical areas, as shown on diagram.

Procedure to Drive Course

1. The approach

- Road position on the approach road is critical before the left turning movement into the entrance of the driveway.
 - Look and plan ahead.
 - For a left turn, set up wide to the right side of the roadway.

Procedure to Drive Course (continued)

- Keep speed down to maintain and ensure control of vehicle.
 - Tight area to maneuver requires slower speeds.
 - Increased speeds will increase the radius of the turn.
- Road position while in the entrance of the driveway is also important.
 - Set up crowding wide to right, close to the delineator for a left turn into top of driveway.
 - This will minimize rear wheel cheat in left turn to delineators on left side.

2. Driving Within the "Y" Driveway

- Steering into top of the "Y" driveway from the entrance is important.
 - · Avoid hitting cones at entrance.
 - Road position and placement of vehicle in top of driveway upon stopping is important. Leave room to the left of the vehicle for front end swing while turning in reverse.
 - Vehicles should stop at top of driveway, crowding cones on left side for backing.
- Judgment of front-end distance
 - Leave sufficient room for front bumper and push bars at top of "Y."
 - Straighten the vehicle in top of the "Y" just prior to coming to a complete stop.
- Backing within top of "Y"

Procedure to Drive Course (continued)

- Look to rear at all times while backing.
- Smoothly steer vehicle straight back pivoting right rear wheel around the delineator.
- Continue backing vehicle into top of "Y" on opposite end allowing for proper road position to set up for exiting mouth of "Y."
- Vehicle should come to a complete stop, parallel with the top edge of "Y" with a sufficient margin between rear bumper and left end of "Y."

· Exiting the "Y"

- Steering accuracy is important to allow room for rear wheel cheat while exiting mouth of "Y."
- · Avoid being too close to cones on left side.
- Avoid excessive throttle which would widen exit path causing vehicle to strike cones on the right side.
- Upon exiting mouth of "Y," attempt to crowd cones on right side for good road position.

Demonstration Phase

- An instructor-driven vehicle will negotiate the course emphasizing the pertinent control techniques.
- Another instructor will verbalize the demonstration.

Practical Application Phase

The student will drive the exercise as demonstrated.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- Visual awareness of obstacles to rear
- · Rear wheel cheat
- Front-end swing
- Use of road position

Parallel Parking Exercise

PRIOR TO OPERATION OF THIS TRAINING EXERCISE THE INSTRUCTOR STAFF SHOULD REVIEW THE POST SAFETY GUIDELINES FOR DRIVER TRAINING.

Materials
Needed

- One law enforcement training vehicle.
- Ten 48" delineators.

Goal

The student will gain the necessary knowledge and ability to parallel park a vehicle safely and efficiently within legal limits.

Objectives

The student will demonstrate the five basic steps that are used to park a vehicle in a limited space.

Introduction

Briefly explain why it is important to have the ability to properly parallel park a vehicle in a limited space.

- Instills confidence in the student and portrays a professional image when arriving at the scene of a law enforcement incident.
- Unless responding to an <u>emergency</u> call, the officer is <u>required</u> to conform to the regulations of the California Vehicle Code.
 - This does not mean double parking with warning lights flashing.
 - Flashing red or amber emergency lights on an illegally parked law enforcement vehicle does not

Introduction (continued)

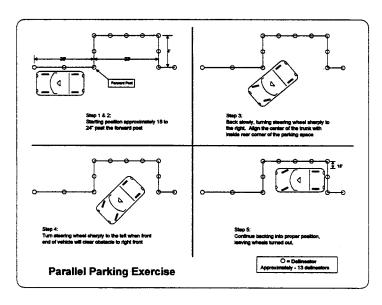
make that manner of parking legal, unless an emergency is present.

- This parking exercise teaches the driver the <u>basic</u> techniques of reverse driving.
- Demands that a driver have an excellent knowledge of the physical dimensions of the vehicle and its turning radius.

Section 22502(a) CVC: "Except as otherwise provided in this chapter, every vehicle stopped or parked upon a roadway where there are adjacent curbs shall be stopped or parked with the right-hand wheels of such vehicle parallel with and within 18 inches of the right-hand curb...where no curbs or barriers bound any roadway, right hand parallel parking is required unless otherwise indicated."

Course Description

- The parking area is approximately 23 feet long and 8 feet wide.
- Delineators are used at each end to simulate legally parked vehicles.



- Delineators are utilized along the right side to simulate a curb.
- An additional delineator is placed 20' ahead of the parking space as a guide for positioning the front of the vehicle prior to the parking maneuver.

Procedure to Drive Course

- The five-step method for parallel parking a passenger vehicle, using one continuous motion, in a limited space:
 - Position the vehicle parallel and 18-24 inches to the left side and slightly ahead of the delineators that represent a vehicle parked in front of the available space. A single delineator 20' ahead of the parking space designates where to place front of vehicle prior to maneuver.
 - Start backing up <u>slowly</u> until the rear bumper of the law enforcement vehicle is approximately even with the traffic cones representing the rear bumper of the parked vehicle. Begin turning the steering wheel quickly to the right and continue backing slowly.
 - Full lock steering may not be needed at this point.
 - All steering movements should be done while the vehicle is in motion, to prevent excessive wear to steering components and tires.
 - Continue backing until the vehicle is approximately at a 45° angle or when the center of the trunk is in a straight line with the delineator that represents the right corner of a parked vehicle to the rear of the available parking space.
 - When this angle or line is obtained, straighten the front wheels quickly and maintain the angle of movement. The driver then directs attention to the front until the front bumper on the law enforcement vehicle has cleared the rear bumper of the parked vehicle. The driver then turns the steering wheel sharply to the left, directing attention to the rear and continues backing slowly. Full lock steering may be needed at this point.

Procedure to Drive Course (continued)

- Stop the vehicle just prior to touching the delineators that represent the front bumper of the parked vehicle and leave the front wheels turned to the left for a quick exit.
- Both right wheels will be within 18 inches of the curb.
- If the officer is going to be within sight of the vehicle, it is recommended that the vehicle be left in this position to facilitate a quick exit if necessary.
- If the driver is going to be away from the vehicle for any length of time, it is suggested that the vehicle be centered in the parking space to allow the exiting of either vehicle to the front or rear.
- Parked vehicles must have the wheels blocked by turning them against the curb when parked on a steep hill (22509 CVC).

Demonstration Phase

- An instructor will demonstrate the proper procedures used for parallel parking of a vehicle by slowly performing each step of the five-step method.
- At the proper time, looking to the rear until completely stopped will be emphasized.
- A seat belt will be worn during the demonstration.

Practical Application Phase

- The student will utilize the techniques presented and practice proper timing, turning radius, correct angle and speed.
- Safety belts will be worn.

Evaluation Phase

The student will be evaluated on performance in the following areas:

- Approach position (18-24 inches)
- Steering control
- Entry angle
- Front-end swing
- · Visual awareness of obstacles to rear
- Correct parking (18" or less from the curb)
- Single movement placement
- Safe exit



notes

Chapter Five

design and management of course

Site Preparation

- The site should be able to accommodate students, vehicles and exercises.
- The training may have separate sites for lecture and driving and should be located conveniently to each other.
- The classroom should be an adequate size.
- The driving area should be free from outside distractions and the public and away from residential areas.
- A flat surface is desirable for driving.
- Restrooms should be available.
- Consideration should be given to providing a site convenient to student travel.
- Initiate a written agreement between the property owner and/or lessee and the law enforcement agency conducting the training absolving each other of liability prior to use of any outside training site.
- Examples of potential training sites could include:
 - Closed freeway corridor
 - Abandoned airfields

Site Preparation (continued)

- Unused parking lots (e.g., schools, businesses)
- Recreational areas during off season
- Closing a public street where convenient detour is available to public
- · Unused, paved, private property of large business

Course Design

- The maneuvering course will require a minimum area of 300 feet by 300 feet (if a square site is available).
 - It is recommended that a larger area be utilized when possible.
 - A larger area would allow each driving problem to be spaced farther apart and increase the margin of safety.
 - If a smaller area is used, training will be conducted on only part of the problems at a time, time must be allowed for tear down and set up of exercises.
- Consider the flow of training traffic at each driving problem so that concurrent training does not cause cross-traffic and potential accidents.
- Avoid implementation of driving exercises other than the ones listed or alteration of the basic design of driver awareness problems.
 - Instructor knowledge is limited to the specific problems in the Driver Awareness Course.
 - An individual agency will potentially have to justify its actions and sustain increased liabilities when straying from format.

Course Design (continued)

- It is recommended that once each maneuvering course is properly set up, the position of each cone be marked as a reference point for future use, which will reduce setup time. This can be done by driving a pre-painted l-inch #16 concrete nail into the pavement where each cone is positioned, or by marking the position of each cone with paint or a grease crayon.
- A carpenter's chalk line can be used to assist in marking straight lines while setting up the maneuvering course.
- Care should be taken to ensure that each cone is positioned according to the appropriate course diagram. If traffic cone configuration is not properly maintained, driver performance may be diminished.
- Slight modification of dimensions of problems may be necessary due to size and capabilities of vehicles utilized and one model of training vehicle should be used to avoid adjustments during training.
- The training site may include an area other than a square or rectangular design.
 - · An "L" shape formed by a street intersection
 - · A straight line portion of a roadway
 - Various shapes formed by merging of more than one roadway.

Equipment/ Resources/ Materials

- Vehicles utilized for training must be pre-checked to minimize potential for delays due to breakdown.
 - Safety is increased when potential problems are prevented.
 - Clean windows aid in performance and safety.

Equipment/ Resources/ Materials (continued)

- Fluid levels and tire pressure should be checked prior to driving.
- Vehicles should be similarly equipped to what is used on duty to make training realistic.
- Emergency communication is necessary in case of injury or illness.
- Obtain sufficient delineators and cones to setup the driving exercises you have selected.
 - Cones and pylons can be obtained from the following:
 - The law enforcement agency's own supply.
 - · City and/or county government departments.
 - · Some major businesses.
 - If delineator pylons cannot be obtained, 28" traffic cones can be modified by placing a 4' x 1" x 1" painted piece of wood or a ½" or ¾" PVC pipe into the top of each cone.
- Additional equipment:
 - Spray paint
 - Clip boards

Safety and Control

- Review POST safety guidelines
- The following are considerations for the actual driving site:
 - First aid kit and fire extinguishers.
 - Location of nearby medical facilities should be known.

Safety and Control (continued)

- Minimum of obstructions on or near course.
- Area should be kept clear of other traffic during training.
- · A designated supervisor should be present.
- Seat belts will be utilized by all occupants whenever a vehicle is in motion.

Scheduling and Notification

- Refresher driver training is recommended every two years.
 - Personnel that regularly drive law enforcement vehicles should attend the training.
 - Statistics indicate that accident involvement increases beyond two years, as the retention of training skills and knowledge weakens with time.
- Proper record keeping and procedures as to scheduling of students will maintain efficiency and alleviate many potential delays of training.
 - Adequate prior notification of students.
 - Allowance for relief factors at regular assignments to ensure availability of students.
 - Scheduling should consider job-related conflicts (e.g., court appearances, upcoming special events).
 - Assign a scheduling coordinator responsible for smooth operation of scheduling.

Format and Hours

- The actual Driver Awareness Course given by instructors to their law enforcement students will be at least eight hours in length.
- Selected areas of instruction for classroom and practical application are contained in this document (<u>Driver Awareness Instructor Course</u> manual).
- Classroom presentation is flexible as to content to allow for modifications to meet the needs of individual agencies; however, each agency will prepare a lecture consisting primarily of information from this manual.
 - Classroom length is recommended at four hours, if possible.
 - Classroom instruction to include:
 - · Registration/introduction
 - · Basic driving principles
 - Civil liabilities (and discussion of individual agency's driving policy)
 - · Vehicle care and maintenance
 - Defensive driving
 - A suggested course outline included later in this manual will act as a guide in preparation of the classroom lecture.
- The driving exercises are flexible only as to the number of problems training at one time and slight modifications of dimensions depending on size and capabilities of vehicles used.
 - Five selected driving problems will be used.

Format and Hours (continued)

- Student-to-instructor ratio shall follow POST safety guidelines.
- Class size depends on number of instructors and site size.

Evaluation of Performance

- Students will be evaluated as to their driving performance, based on techniques demonstrated by instructors and in conformance with the basic principles of driving emphasized in the classroom lecture.
- The evaluation shall be as objective as possible through use of the course Rating Sheet which consists of a breakdown of each driving exercise into specific grading areas. The Rating Sheet is included in this manual as Addendum #1.
- Each grade may be categorized by the instructor in the following classifications:
 - Below Standard
 - Acceptable
 - Above Average
- A comment section is provided on the Rating Sheet for each driving exercise for specific instructor comments.
 - This section should be used for any grading in the Below Standard classification.
 - Below Standard should be considered as improvement needed and additional instruction and driving time should be given at the time of training.

Evaluation of Performance (continued)

- The main consideration for Below Standard is to identify drivers who need additional training.
- Documentation is as necessary in this driving course as with any other evaluation of personnel performance.
- If remediation during any specific course fails to raise performance above Below Standard classification, consideration should be given to:
 - Notification of performance to department head.
 - Scheduling of student in next training session.
 - Temporary assignment to duties where driving is not required.
 - Risk management.

Documentation

- Each agency should document the following elements of the Driver Awareness Course for its own reference and POST Certification.
 - Names of students
 - Evaluations (Rating Sheets)
 - Dates and times of training
 - Names of instructors and dates of qualification training

Documentation (continued)

Lesson plans

- Driver Awareness Instructor Course manual
- Specific lecture content as determined by agency needs.
- Each agency should compile accident analysis data to determine where emphasis can be placed in both lecture and driving portions of this course.

Contingency Planning

- An alternate training site should be secured in the event of a last-minute cancellation of the primary site.
 - The alternate site should be given the same consideration as the primary site.
 - A practice setup should be carried out.
 - An alternate classroom site should also be considered.
 - Consider having back-up instructors available.
- Training programs can experience certain problems that, if not previously considered during pre-planning, can cause cancellation.
 - · Consider problems in the classroom.
 - Ensure there is no conflict of use of the classroom, by others within the unit, or outside groups.
 - Make sure all necessary equipment will be available and in working order; locate back-up equipment.

Contingency Planning (continued)

- At the field site, have open communication on a regular basis with the land owner/lessee.
- Take the time before the start of every course to consider potential problems; a few minutes pre-planning is worthwhile when the alternative may be a loss of all or a major portion of the training site.

Chapter Six

legal aspects

Introduction

It is imperative that EVOC instructors provide students with comprehensive information concerning the statutes and case law decisions that define the proper operation of law enforcement vehicles.

Officers routinely face the possibility of being held civilly liable for their actions or the actions of their subordinates in law enforcement driving activities. Certain general legal principles are common to the three types of law enforcement driving (non-emergency, emergency response, and pursuit). The concepts of "negligence," and "willful misconduct," are central to understanding how officers may be judged responsible for injuries sustained by third parties that arise from law enforcement driving operations.

Whether the injury arises from a deficiency during nonemergency activity, such as an officer's negligent placement of the vehicle during a routine call; an emergency response, such as failure to activate warning devices when responding to a life-threatening situation; or during the course of a pursuit which creates excessive danger to the public, injured parties frequently assert that the offending officer's conduct was unreasonable under the circumstances or that it constituted an intentional disregard for the victim's safety.

Officers must be aware of the potential for civil lawsuits filed against them by injured parties, either in state court or federal court. They must conduct their driving activities in non-emergency, emergency response, and pursuit modes so as to

Introduction (continued)

minimize liability to themselves and their agencies. Extreme disregard for the safety of the public or other officers may well constitute recklessness or willful misconduct that can serve as a basis for criminal sanctions against the officer or supervisor in either state court, federal court, or both.

The following statutes and comments provide an overview of relevant material for an instructor to know and utilize in preparing driver training instruction.

California Codes

Sections 17001, 17004, 17004.7 of the California Vehicle Code (CVC) discuss civil liability and immunity for public entities and public employees during the operation of a law enforcement vehicle within the scope of employment.

17001 CVC

Every public entity (state, county, city, etc.) is liable for death or injury to person or property proximately caused by a negligent or wrongful act or omission in the operation of any motor vehicle by an employee of the public entity acting within the scope of his employment.

17004 CVC

A public employee is not liable for civil damages on account of personal injury to or death of any person or damage to property resulting from the operation, in the line of duty, of an authorized emergency vehicle while responding to an emergency call or when in the immediate pursuit of an actual or suspected violator of the law, or when responding to but not upon returning from a fire alarm or other emergency call.

17004.7 CVC

This Section provides immunity to a public entity from civil liability for personal damages, death or property damage resulting from a collision with a vehicle driven by an actual or suspected law violator pursued by a peace officer if the public employer adopts a written policy with the following specified minimum standards for a safe pursuit:

• If available, there should be supervisory control of a pursuit.

- Procedures for designating the primary pursuit vehicle and for determining the total number of vehicles to be permitted to participate at one time in the pursuit.
- Procedures for coordinating operations with other jurisdictions.
- Guidelines for determining when the interest of public safety and effective law enforcement justify a vehicular pursuit and when a vehicular pursuit should not be initiated, or should be terminated.

Sections 21052, 21055, 21056, 21057, 21806, 21807, 22350 of the California Vehicle Code identify driver requirements for due regard for the safety of all persons on a highway, and specify that these provisions apply to all law enforcement officers.

21052 CVC

The provisions of this code applicable to the drivers of vehicles upon the highways apply to the drivers of all vehicles while engaged in the course of employment by this state, any political subdivision thereof, any municipal corporation, or any district, including authorized emergency vehicles subject to those exemptions granted such authorized emergency vehicles in this code.

21055 CVC

The driver of an authorized emergency vehicle is exempt from Chapter 2 through 10 of Division 11, and article 3 and 4 of Chapter 5 of Division 16.5 under all of the following conditions:

• If the vehicle is being driven in response to an emergency call or while engaged in rescue operations or is being used in the immediate pursuit of an actual or suspected violator of the law or is responding to, but not returning from, a fire alarm......21055(a).

• If the driver of the vehicle sounds a siren as may be reasonably necessary and the vehicle displays a lighted red lamp visible from the front as a warning to other drivers and pedestrians......21055(b).

21056 CVC

Section 21055 does not relieve the driver of a vehicle from the duty to drive with due regard for the safety of all persons using the highway, nor protect him from the consequences of an arbitrary exercise of the privileges granted in that section.

21057 CVC

Every law enforcement officer is hereby expressly prohibited from using a siren or red light or driving at an illegal speed when serving as an escort of any vehicle, except when the escort or conveyance is furnished for the preservation of life.

21806 CVC

Upon the immediate approach of an authorized emergency vehicle which is sounding a siren, and which has at least one lighted lamp exhibiting a red light that is visible, the driver of every other vehicle shall yield the right-of-way and shall immediately drive to the right-hand edge or curb of the highway and stop.

21807 CVC

Provisions of 21806 shall not operate to relieve the driver of an authorized emergency vehicle from the duty to drive with due regard for the safety of all persons and property.

22350 CVC

No person shall drive a vehicle upon a highway at a greater speed than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.

Section 165 California Vehicle Code defines an authorized emergency vehicle as any vehicle owned and operated by a governmental entity and used by employees in the performance of law enforcement duties or other emergency services.

Section 13519.8 California Penal Code provides standards for minimum guidelines to be used by law enforcement agencies in developing department policies and training related to the conduct of vehicular pursuit of known or suspected violators of the law.

Section 669 of the Evidence Code can be applied to actions from driving a law enforcement vehicle. It identifies a need to exercise due care and may be used as a basis for a claim in civil (tort) litigation.

- The failure of a person to exercise due care is presumed if:
 - There is a violation of a statute, ordinance, or regulation of a public entity;
 - The violation proximately caused death or injury to person or property;
 - The death or injury resulted from an occurrence of the nature which the statute, ordinance, or regulation was designed to prevent; and
 - The person or persons suffering the death, or injury to that person or property was one of the class of persons for whose protection the statute, ordinance, or regulation was adopted.
- This presumption may be rebutted by proof that:
 - The person violating the statute, ordinance, or regulation did what might reasonably be expected of a person of ordinary prudence, acting under similar circumstances, who desired to comply with the law . . .

The instructor should emphasize the importance of the student understanding the potential impact of Section 669. Not only must a peace officer know what the agency's policy states, that officer must

be in compliance or acting reasonably otherwise, and the officer's actions are subject to examination at a later date by the courts. Presumption of failure to exercise due care increases the likelihood of being held personally liable in criminal and civil court. Many court decisions base the admission and weight of agency policy guidelines submitted into evidence on this statute. The courts have restricted law enforcement in driving situations due to the impact of case law, and an acknowledgment of an increased hazard to the public during vehicle operation.

669.1 Evidence Code Presumption or failure to exercise due care - violation of government rule, policy, manual, or guideline.

- "A rule, policy, manual, or guideline of state or local government setting forth standards of conduct or guidelines for its employment shall not be considered a statute, ordinance, or regulation of that public entity within the meaning of Section 669, unless the rule, manual, policy, or guideline has been formally adopted as a statute, as an ordinance or a local government entity in this state empowered to adopt ordinances, or as a regulation by an agency of the state pursuant to the Administrations Procedure Act or by an agency of the U.S. Government pursuant to the Federal Administrative Procedures Act."
- This section affects only the presumption set forth in Section 669 and is not otherwise intended to affect the admissibility or inadmissibility of the rule, policy, manual, or guideline under other provisions of law.

Instructor discussion regarding these statutes should include that:

 Code-3 operation of an emergency vehicle introduces hazards that are not present during the normal operation of law enforcement vehicles.

- Speeds which may be considered as reasonable and prudent by the courts may be less than the posted speed limit, depending on weather and traffic conditions.
- If a law enforcement officer is involved in a collision while driving Code-3 and the siren was not being used, a subsequent investigation will probably disclose that use of the siren was required pursuant to Sections 21055 and 21806 CVC.
- Immunity from civil liability may only be available
 when the emergency vehicle is being operated while
 displaying a red light, the siren utilized when
 reasonable to do so, and then, only when the vehicle
 is being operated with due regard for the safety of all
 persons using the highway.
- During Code-3 operation, officers must allow their actions to be guided by sound professional judgment.
- The Vehicle Code is very specific as to the driving conduct of government employees operating an emergency vehicle under "ordinary" conditions (21052 CVC).
- Injuries sustained in a traffic collision are generally more severe than most other types of on-duty injuries. Approximately fifty percent of all on-duty law enforcement deaths are the result of vehicle collisions.
- In cases where a law enforcement officer becomes involved in a traffic collision while operating a law enforcement vehicle and is acting within the scope of employment, both the agency and the officer may be financially liable for damages caused as the result of a traffic collision.

- It is important that law enforcement drivers fully understand the potential safety risks and legal liabilities involved in emergency driving, particularly in the following situations:
 - Safely clearing intersections requires stopping, if necessary, before entering and then proceeding and clearing the intersection lane-by-lane.
 - Passing other vehicles while operating Code-3 requires extreme caution, and consideration should always be given to the potential hazards of passing on the right. (Refer 21806/21807CVC)
- The physiological and psychological stresses involved in Code-3 operations require the constant attention of the law enforcement driver, particularly related to speed awareness and the potential for tunnel vision.
- Law enforcement vehicle emergency warning devices (lights and siren) are intended to warn other motorists of an approaching emergency vehicle. These warning devices require other motorists to yield the right-of-way, but do not guarantee that will occur. Law enforcement drivers must drive with consideration for these limitations.

California Case Law

Introduction

Case law decisions have as much impact on law enforcement behavior as legislated laws. The difficulty for all members of law enforcement is to keep abreast of changes in interpretation, and to properly relate those decisions to other situations where similarities exist. Case law, in driving situations especially Code-3 operation, has traditionally been more restrictive of law enforcement due to the potential threat to the safety of large numbers of the public. Following are some pertinent decisions worthy of consideration.

PETERSON vs. CITY OF LONG BEACH/05-16-79 (24 Cal.3d 238; 155 Cal.Rptr. 360, 594 P2d 477

Instructor's Note:

The Peterson case is used here because of its reference to current laws in effect (669 Evid.C). There have been similar case law decisions specifically involving vehicle operation based on failure to comply with department "rules" (Torres vs. City of Los Angeles/06-21-62, 58 C2d.35; 22 Cal.Rptr. 866, 372 P.2d 906) and noncompliance with "training bulletins" (Dillenbeck vs. City of Los Angeles/10-28-68, 69 C2d,472; 72 Cal.Rptr. 321, 446 P.2d 129). These cases are frequently cited because laws now in effect are similar to those superseded laws originally considered.

1. Summary of Case

In 1972 a Long Beach law enforcement officer responded to what was later determined to be an erroneous report of a burglary in progress and observed Peterson running from the (Peterson's) location. There was no articulation of evidence of a weapon and as Peterson fled, the officer shot and killed the "suspect." The family sued the law enforcement department and officer alleging the officer failed to comply with specific law enforcement department policy guidelines restricting use of deadly force. The policy limited use of deadly force to circumstances "only after all other means fail...in the necessary defense from death or serious injury of another person attacked...to effect an arrest, to prevent an escape, or to recapture an escapee when other means have failed, of an adult felony suspect when the officer has reasonable cause to believe that (a) the crime for which this arrest is sought involved conduct including the use of or threatened use of deadly force and (b) there is a substantial risk that the person whose arrest is sought will cause death or serious bodily harm if apprehension is delayed" (emphasis in original). The original trial court held that the officer acted within the existing state law (197 PC) and found for the officer and city.

2. Case Law Decision

The California Supreme Court (4 to 3) reversed the trial court stating that while the officer acted within the general definition of Penal Code Section 197 (Criminal Liability), the central issue of civil liability dealt with the officer's failure to comply with the more restrictive policy guidelines on use of deadly force. The guidelines were held to be inclusive within the requirements of Section 669 of the Evidence Code (enacted 1967). Section 669 Evid. C. held that "the failure of a person to exercise due care is presumed if...he violated a statute, ordinance, or regulation of a public entity...". The officer and his department were held civilly liable in this incident.

PETERSON vs. CITY OF LONG BEACH (continued)

3. Impact on Law Enforcement

Although this is not a driving case, it impacts law enforcement conduct in future incidents where there is a failure to act within the more restrictive guidelines of department policy vs. state law. If a peace officer is acting within state law requirements but not within specific policy regulations, that officer may be judged civilly liable, as to be determined by 669 Evid.C. and the specifics of the particular incident.

BRUMMETT vs. COUNTY OF SACRAMENTO/08-24-78 (21 Cal.3d 880; 148 Cal.Rptr.361, 582 P2d 952

1. Summary of Case

Two sheriff's deputies were engaged in a high-speed pursuit of a bank robbery suspect. Within an intersection, both deputies' vehicles struck another vehicle and one of the two patrol cars careened into a vehicle stopped in a left turn lane. The deputies' own testimony in the civil trial that ensued revealed the following:

Although uncertain of his speed, one deputy doubted he was exceeding 80 mph, but his speed was so excessive that effective evasive maneuvers were not possible, and he was unaware of the color of the light when he entered the intersection; the other deputy thought he was going 90 miles per hour at the highest rate of speed during the pursuit, that he did not step on his brakes at all, even though other vehicles were in the intersection, and he acknowledged that law enforcement practices advised "if there is a problem" with chasing a suspected felon, the officers were to cease pursuit, and that he understood this to refer to traffic conditions. The trial court held that pursuant to 17004 CVC the deputies were not personally civilly liable while in pursuit of a felony suspect. The county also was held not liable pursuant to Section 815.2 Government Code which stated "except as otherwise provided by a statute, a public entity is not liable for an injury resulting from an act or omission of an employee of the public entity where the employee is immune from liability."

BRUMMETT vs. COUNTY OF SACRAMENTO (continued)

2. Case Law Decision

The California Supreme Court unanimously reversed the trial court decision on liability of the county and upheld the immunity of the deputies. The specifics of 815.2 Government Code states "Except as otherwise provided by statute" and the Supreme Court held that Section 17001 CVC removes any immunity from the public entity for negligence of its employees. The key in this case for county liability is whether the deputies were acting within the confines of 21056 CVC. However, the physical evidence and testimony of the deputies themselves showed a negligence on their part for the safety of others.

3. Impact on Law Enforcement

Due to the presence of potential civil liability to local and state government, there has been an increase in restrictive guidelines (policy) to reduce the number of incidents where lawsuits will follow. Individual officers should not rule out the potential for personal liability if gross violations of Section 21056 CVC occur. It is also important to follow the requirements of 21055(a) and (b) CVC and roll Code-3 to protect themselves when they violate the "rules of the road."

This case involved the direct operation of a motor vehicle by an officer who became involved in an accident.

DUARTE vs. CITY OF SAN JOSE/0102-80 (1000 Cal.App. 3d 648; 161 Cal.Rptr.140)

1. Summary of Case

In 1975, a San Jose law enforcement officer arrested a suspected drunk driver. The suspect was handcuffed and placed in the rear seat of the patrol car. The suspect, who had been cooperative and "all but incapacitated by intoxication," complained of discomfort due to the handcuffs, and the officer removed them. The suspect was left "locked" in the rear area of the parked vehicle (with keys in the ignition and engine apparently running) while the officer assisted

DUARTE vs. CITY OF SAN JOSE (continued)

another officer in moving the suspect's vehicle. The suspect unlocked the rear door, exited, and re-entered into the front seat and drove off. Two other law enforcement vehicles pursued the suspect at speeds up to 65 mph until they briefly lost sight of him. The suspect exited the roadway and struck and seriously injured a man who was mowing his lawn. The city claimed immunity under 815.2 and 845.8 of the Government Code (the latter provides immunity for a public entity when a person in custody/detention escapes and injures a third person in that escape). The trial court held for the city and its officers.

2. Case Law Decision

The California Court of Appeals held unanimously (3-0) that the officers were immune under 845.8 Government Code but that the city should be held liable under 17001 CVC Negligent vehicle operation by a public entity's employee was held to encompass allowing the circumstances to exist (vehicle unattended, motor running) for the suspect to use the patrol car to flee.

3. Impact on Law Enforcement

Again, there was no personal liability to the officers, but the court is sending a clear message to public entities that it will hold them liable for negligence on the part of employees. Specific policy guidelines are the likely result as agencies attempt to clearly define proper and improper behavior, hoping to limit lawsuits. The more specific the policy guidelines become, the easier it may become for others to show non-compliance by an employee, thus not "exercising due care" (negligence) as per 669 Evid. Code. This case, while not involving the direct operation of a vehicle by an officer, resulted in the ability of a suspect to become involved in a traffic accident.

GRANT vs. PETRONELLA/07-30-75 (50C.A.3d 281; 123 Cal.Rptr. 399)

1. Summary of Case

In 1971, a deputy sheriff (defendant) was responding on the freeway to an emergency, at a rate of speed higher than the posted speed limit, and collided with a vehicle (plaintiff's) that was traveling in the same direction in front of him. The emergency vehicle was in the innermost lane, and as the deputy attempted to swerve to the left, his vehicle's right front bumper struck the left rear or left door of the other vehicle. There was a dispute as to whether the other vehicle was already in the number one lane or changed lanes just prior to the collision. The deputy was not utilizing the vehicle's emergency red lights or its siren, and an argument was given that doing so "is not a safe procedure" on a freeway. The plaintiff argued that if an emergency vehicle is not Code-3 (21055 CVC), then it must comply with the same rules of the road as all other vehicles. The defendant argued that the emergency situation should be given consideration as to the justification for the deputy's driving in violation of specific Vehicle Code section(s) and requested that the appropriate jury instruction (BAJI 5.80) be given the jury. The trial court failed to advise the jury of the substance of 21055 CVC, and gave the BAJI 5.80 instruction. A judgment was made for the defendant and the plaintiff appealed.

2. Case Law Decision

The Court of Appeals unanimously overturned the trial court's decision due to the actions of the court in failing to provide information to the jury on 21055 CVC and giving the BAJI 5.80 instruction. Due to the fact the "emergency vehicle" was not in compliance with 21055 CVC and Code-3, it was not exempt from the rules of the road and its driver was therefore required to comply with the same laws as other drivers. Additionally, by not being Code-3, the jury should not consider the nature of the emergency as to why the vehicle was being driven in the manner it was.

GRANT vs. PETRONELLA (continued)

3. Impact on Law Enforcement

If an officer is involved in emergency driving, the officer must comply with 21055 CVC and utilize the law enforcement vehicle emergency lights and siren - as reasonably necessary. If the officer is in compliance with 21055 CVC, then violations of the Vehicle Code do not necessarily determine negligence, and the test is weighed against 21056 CVC and the "reasonable" actions of the officer.

STARK vs. CITY OF LOS ANGELES/05-16-85 (168 Cal. App. 3d 276; 214 Cal. Rptr. 216)

1. Summary of Case

Los Angeles law enforcement officers observed a suspicious person in a vehicle who was violating the Vehicle Code. As the officers followed in their marked vehicle, the suspect picked up speed and as the officers' vehicle was held up in traffic, the suspect made a squealing left turn," apparently attempting to flee". As the patrol car turned left, the officers observed the suspect run a stop signed intersection at approximately 55 mph, drive through a yield signed intersection, and another stop signed intersection. The officers were approximately 500-600 feet behind, and although following, had not yet activated red lights and siren. At this point, the officers were preparing to initiate a Code-3 pursuit when they observed the suspect vehicle enter another intersection and broadside the plaintiff's vehicle. The trial court found that the city was not immune under 845.8 Government Code, and liable under 17001 CVC due to the failure of the officers to initiate their siren to warn other motorists ahead. The court felt the officers. by their actions, were in pursuit of the suspect. The city appealed the verdict.

2. Case Law Decision

The court of appeals unanimously affirmed the trial court on all points (3-0). While the officers were not personally liable, the public entity was held accountable for injury to a third person.

STARK vs. CITY OF LOS ANGELES (continued)

3. Impact on Law Enforcement

Providing an attempt to warn other motorists will be deemed reasonable and lessen the impact of potential lawsuits for not providing any warning at all. The court is willing to interpret what constitutes a "pursuit" when the "following" begins to violate Vehicle Code statutes.

Book of Approved Jury Instructions (BAJI)

The following information is given as part of the instructions by the court to a jury with regard to emergency driving situations. Under some circumstances some of these instructions which could be beneficial to law enforcement's case cannot be given due to actions or omissions by officers. The specific instruction(s) given will be determined by the specifics of the individual case.

"Authorized Emergency Vehicle Exemption" (BAJI 5.80):

- It is the duty of the driver of an authorized emergency vehicle to exercise that amount of care which, under all the circumstances, would not impose upon others an unreasonable risk of harm. That standard of conduct which is reasonable under all the circumstances must, of course, take into consideration the unusual circumstances confronting the driver of an authorized emergency vehicle that is, the emergency which necessitates immediate action and the duty imposed upon the driver to take reasonable and necessary measures to alleviate the emergency. The question to be asked is, "What would a reasonable, prudent emergency driver do under all of the circumstances, including that of the emergency?"
- The California Vehicle Code provides that the driver of an authorized emergency vehicle is exempt from and need not observe the provisions of the Vehicle Code under the following conditions:

Book of Approved Jury Instructions (BAJI) (continued)

- The vehicle is being driven in response to an emergency call or while engaged in rescue operations or is being used in the immediate pursuit of an actual or suspected violator of the law or is responding to a fire or fire alarm, (except that fire department vehicles are exempt whether directly responding to an emergency call or operated from one place to another as rendered desirable or necessary by reason of an emergency call and operated to the scene of the emergency or operated from one fire station to another or to some other location by reason of the emergency call); and
- If the driver of the vehicle sounds a siren as may be reasonably necessary and the vehicle displays a lighted red lamp visible from the front as a warning to the other drivers and pedestrians.
- When the foregoing requirements are met, then it is not negligence as a matter of law for the driver of the authorized emergency vehicle to fail to observe those provisions of the Vehicle Code from which the driver is exempt. This exemption, however, does not relieve the driver of such vehicle from the duty of drive with due regard for the safety of all persons using the highway, nor does it protect the driver from the consequences of an arbitrary exercise of the privileges granted under the exemption.
- An arbitrary exercise of the privileges granted means an act performed either with knowledge that serious injury to another will probably result, or with wanton and reckless disregard of the possible consequences. (It has been established in this case that the vehicle operated by the defendant (driver) was an authorized emergency vehicle).

Book of Approved Jury Instructions (BAJI) (continued)

"Test of an Emergency" (BAJI 5.81):

In determining whether an emergency vehicle was being driven in response to an emergency call, the test is not whether an emergency in actual fact existed, but rather whether the driver had received a report or a request or was informed of circumstances that would reasonably justify the belief that an emergency existed to which the driver was required to respond in the line of duty.

"Duty to Anticipate Criminal Conduct of Third Person" (BAJI 3.13.1):

When the circumstances are such that the possibility of harm caused by the criminal conduct of a third person is, or in the exercise of due care should be, reasonably foreseeable, it is negligence to fail to use reasonable care to prevent such criminal act from causing (injury) (damage).

"Negligence Per Se-Violation of Statute, Ordinance, or Safety Order" (BAJI 3.45):

If you find that a party to this action violated ______, the (statute) (ordinance) (safety order) just read to you (and that such violation was a (proximate) (legal) cause of injury to another or to himself), you will find that such violation was negligence (unless such party proves by a preponderance of the evidence that he did what might reasonably be expected of a person of ordinary prudence acting under similar circumstances, who desired to comply with the law. In order to sustain such burden of proof, such party must prove by a preponderance of the evidence that he was faced with circumstances which prevented compliance or justified noncompliance with the (statute) (ordinance) (safety order)).

"Duty of the Driver of Vehicle on Public Highway" (BAJI 5.00):

It is the duty of the driver of any vehicle using a public street or highway to exercise ordinary care at all times to avoid placing

Book of Approved Jury Instructions (BAJI) (continued)

the driver or others in danger; (and) to use like care to avoid an accident; (to keep a proper lookout for traffic and other conditions to be reasonably anticipated) (and) (to maintain a proper control of the vehicle).

"Basic Speed Law" (BAJI 5.30):

The speed at which a vehicle travels upon a highway (not in excess of _____ miles per hour), considered as an isolated fact and simply in terms of so many miles an hour, is not proof either of negligence or of the exercise of ordinary care.

Whether that rate of speed is a negligent one is a question of fact, the answer to which depends on all the surrounding circumstances.

The basic speed law of this state (as provided by Section 22350 of our Vehicle Code,) is as follows:

"No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property."

A violation of this basic rule is negligence.

Federal Case Law

Introduction

Law enforcement is required to operate in a dynamic environment of case law decisions. As the courts decide what is proper and improper conduct, it is our responsibility to adapt our policies and training to meet those interpretations. Section 17004.7 of the California Vehicle Code provides civil immunity, under certain conditions, to public entities during pursuits - specifically where the actions of fleeing suspects have caused third party injury or death.

Federal Case Law (continued)

The initial response by plaintiffs' attorneys to this immunity protection was to seek a detailed critique of the actions of law enforcement personnel in each pursuit, and attempt to show a noncompliance with the policy. In <u>Kishida v. State of California</u> and <u>Weiner v. City of San Diego</u>, the state appellate courts ruled that if an agency's policy is ruled compliant with certain standards cited in the law, the immunity exists. In <u>Montes v. United States</u> the federal courts upheld the protections of the California law to federal law enforcement agencies whose policies met those standards. No further review of officer actions was required under case law.

The obvious next step for plaintiffs' attorneys was to attack the individual policy of the agency for being noncompliant with the minimum standards of Section 17004.7. In <u>Colvin v. City of Gardena</u>, a police department policy was ruled lacking in guidelines for initiating and discontinuing vehicular pursuits, and failing to provide procedures for designating the primary unit and the number of participating vehicles. The court felt that too much was left to individual officer discretion. This resulted in more specific guidelines or factors for consideration being established in policies. This ruling allowed the plaintiff's case to be tried in court at a later date, without the automatic immunity guarantee provided by Section 17004.7.

The state courts began granting immunity to law enforcement agencies whose policies met the court review process as to compliance with Section 17004.7. Agencies have adopted policies that have become more and more standardized. Plaintiffs' attorneys have subsequently turned to the federal court system for compensation, since the immunity provided by Section 17004.7 CVC does not apply under federal law. In federal court a plaintiff must prove a constitutional violation, primarily of the Fourth and Fourteenth Amendments in pursuit driving situations. The Federal Civil Rights Act (Title 42, U.S. Code, Section 1983) provides an avenue for these plaintiff actions. Some case law decisions that have an impact on law enforcement vehicle operations are not driving related. That does not minimize the importance of the judicial opinion and

Federal Case Law (continued)

its influence on the driving policy we establish, and the manner in which we conduct ourselves on the job while behind the wheel.

Refer: Kishida v. State of California, 229 Cal.App.3d 329, 280 Cal.Rptr. 62 (1991)

Weiner v. City of San Diego, 229 Cal.App.3d 1203, 280 Cal.Rptr.818 (1991)

Montes v. United States of America, 778 F.Supp. 19 (S.D.Cal. 1991)

Colvin v. City of Gardena, 11 Cal.App. 4th 1270, 15 Cal. Rptr. 2d 234 (1992)

MONELL vs. NEW YORK CITY DEPARTMENT OF SOCIAL SERVICES, 436 U.S. 658, 98 S.Ct. 2018 (1978)

1. Summary of Case

Female employees of the City of New York sued their respective agencies alleging an official policy compelling pregnant employees to take unpaid leaves of absence before such leaves were required for medical reasons. The principal question at issue was whether the "Federal Civil Rights Act" (Title 42, U.S.Code, Section 1983) is applicable to governmental entities as "individuals," so that a lawsuit could go forward.

2. Case Law Decision

The Supreme Court concluded that it was the intent of Congress to include local government agencies in the definition of "person" under Section 1983. They could not be granted the federal immunity provided to the state government. That allowed these entities to be sued directly for monetary, injunctive, and declaratory relief where their allegedly unconstitutional conduct "implements or executes a policy statement, ordinance, regulation or decision officially promulgated by that body's officers." The Court also ruled that a lawsuit could occur against unofficial policy or custom,

MONELL vs.
NEW YORK
CITY
DEPARTMENT
OF SOCIAL
SERVICES
(continued)

even if it has not received formal approval. Prior to this case, a plaintiff could not sue a public entity or agency in Section 1983 cases.

3. Impact on Law Enforcement

The number of lawsuits against local government entities increased tremendously where "policies, customs or practices" could be viewed as violating Constitutional guarantees. Policy makers are now more likely to write guidelines that are more clearly understood by their employees, with the expectation that there will be more compliance. With more specific language comes accountability and a potentially stricter interpretation by the courts. Training is likely to be held accountable for properly preparing employees to follow the rules in their daily duties.

TENNESSEE vs. GARNER, 105 S.Ct.
1694, 471 U.S. 1, 85
L.Ed.2d 1, 53 USLW
4410 (1985)

1. Summary of Case

Memphis officers responded to a report of a nighttime residential burglary. An officer observed and chased a fleeing 15-year-old suspect through the rear yard. The officer could not articulate any concern that the suspect was armed or provided an immediate threat to the officer or others. The apparent sole purpose of his use of a firearm against the suspect was to prevent escape, which was permitted at that time under Tennessee law. The suspect was shot and killed, and no state charges were filed against the officer. The suspect's father brought a wrongful death action, under the federal civil rights statute, against the officer and his department. He alleged that the force used was excessive and in violation of the suspect's right to be free from unreasonable seizures under the Fourth Amendment.

2. Case Law Decision

In a split decision, the Supreme Court ruled that the application of the Tennessee law was unconstitutional and that the officer unreasonably "seized" the suspect

TENNESSEE vs. GARNER (continued)

through the use of deadly force. The old English Common Law interpretation justifying the use of deadly force on fleeing felons was viewed as too strict in current times, given the fact that not all felonies today are capital crimes as they were hundreds of years ago. Additionally, the Court cited the fact that, in practice, many police agencies required a stricter standard for use of deadly force (the capability and opportunity to seriously harm) than most state laws. A factor which weighed heavily in this case involved the lack of articulated justification by the officer to stop the suspect from fleeing by use of deadly force. The sole reason of preventing escape was ruled not sufficient. There was no reasonable evidence that this was anything other than a property crime, not a violent crime.

3. Impact on Law Enforcement

Although this is not a driving case, it is cited repeatedly in situations where deadly force, or its equivalent, is used. During the vehicular pursuit of a fleeing suspect, an officer must consider the nature of the crime and the threat the suspect presents to the public when deciding what tactics will be employed. The use of firearms, ramming, etc. to stop the suspect should only occur in cases where deadly force would be reasonable and justified. The mere fact that the crime is a felony may not be sufficient to justify an action or tactic that is subsequently deemed by the court to be the equivalent of deadly force. As stated in this decision, "whenever an officer restrains the freedom of a person to walk away, he has seized that person. It is plain that reasonableness depends on not only when a seizure is made, but also how it is carried out."

BROWER vs. INYO COUNTY, 489 U.S. 593, 109 S.Ct. 1378 (1989)

Summary of Case

In 1984, a deputy sheriff was pursuing a grand theft auto suspect at night in a rural area at high speed. After about twenty miles, the deputy requested a road block to

BROWER vs. INYO COUNTY (continued)

stop the suspect. An assisting unit established a roadblock positioning a tractor trailer across the roadway on the backside of a curve. The assisting deputy also positioned his unit near the curve and used his vehicle spotlight in such a manner that it blinded the suspect's view of the roadblock. The suspect was killed in the subsequent collision with the trailer that was blocking the roadway.

2. Case Law Decision

The Supreme Court stated that, in this case, the use of a "deadman's roadblock" was deemed a violation of the suspect's Fourth Amendment rights particularly because it was intentionally applied. There was no opportunity for the suspect to do anything but crash, given specific actions of the deputy at the roadblock. This ruling was also influenced by **Tennessee v. Garner**.

3. Impact on Law Enforcement

This ruling makes a strong statement about the potential for specific driving actions being deemed a violation of a suspect's Fourth Amendment right to be protected from unreasonable seizure. Tactics which are reasonably likely to cause serious injury or death to a suspect will be scrutinized in the future. This case ruled that seizure may be applied where a pursuit results in a "termination of freedom of movement through means intentionally applied." The criteria stated in Tennessee v. Garner (using deadly force only when the nature of the crime and the potential threat to public safety caused by the suspect can be articulated) will be influential in any decision of the court. It is not likely that the court will permit certain tactics on suspects wanted for minor offenses. Actions taken by law enforcement likely to produce the same result as the use of firearms should only be utilized in situations where deadly force would be justified and reasonable.

BROWER vs. INYO COUNTY (continued)

Note: The driving tactic commonly known as "Pursuit Intervention Technique (PIT)" is not the same as "ramming." When applied as trained, it has been demonstrated that PIT is relatively safe. Its use, like any other form of "legal intervention," carries potentially increased liability because it is initiated by law enforcement. Guidelines for its use, as in any offensive tactic, should be carefully prepared and adequately trained prior to use. Many departments have placed PIT and road spikes in a separate category from other forms of legal intervention in their policies, and do not categorize these tactics as using deadly force. The key to this issue: is a certain tactic allowed per policy, and how and when is the tactic applied?

CANTON vs. HARRIS, 489 US 378, 103 L. Ed. 412, 109 S.
Ct. 1197 (1989)

1. Summary of Case

The plaintiff was arrested by officers and taken to the department lockup. The plaintiff was incoherent and fell to the floor. She was allowed to remain on the floor so that she would not fall again and no medical aid was summoned. The Watch Commander had sole responsibility for determining whether an inmate should receive medical attention. Watch Commanders receive no special training, other than basic first aid, to evaluate inmates in custody who might require medical care. Upon release, the plaintiff was taken by her family to a hospital where she was admitted for one week for severe emotional ailments. She required a year of outpatient care.

2. Case Law Decision

The Supreme Court held that a municipality or its agencies may be subject to civil rights liability if it can be demonstrated that a constitutional violation occurred as a result of its policy (or lack of policy). In this case, the matter involved a lack of training for Watch Commanders. It was determined that there was a "reasonable expectation" that Watch Commanders

CANTON vs. HARRIS (continued)

would be faced with situations where inmates in their custody would require medical care. The court ruled that if it reasonably expected that a Watch Commander would be required to evaluate the medical needs of persons in their care, there should be some form of training provided them to aid in their evaluation. Inadequacy of police training may serve as a basis for civil rights liability only where the failure to train amounts to "deliberate indifference" to the rights of persons with whom the police come into contact. Deliberate indifference is generally described as when action is not taken in face of a strong likelihood, rather than a mere possibility, that failure to provide action will result in harm. It generally requires some level of conscious indifference. If the need for different training (than normally received) is so obvious that violations of constitutional rights are likely, then the policy makers can reasonably be said to have been "deliberately indifferent" to that need. It is the adequacy of the program that is key, not the shortcomings that may result from the actions of an individual that is negligent. The plaintiff must prove the deficiency of the training program actually caused the police officer's indifference to the constitutional rights of the plaintiff. The court cited, as an example, the issue of a law enforcement agency arming its officers with firearms, and the likelihood that those officers would be called upon at some time to attempt to arrest persons who flee from them. The constitutional guarantees secured under such case law as **Tennessee v. Garner** will be expected to be taught to officers who are likely to be faced with fleeing suspects who fail to heed warnings to stop. The need for such training is "so obvious" that failure to do so could properly be characterized as "deliberate indifference." The same argument could easily be made in pursuit situations regarding law enforcement's choice of actions to take against suspects fleeing in a vehicle. A second method of municipal liability for failure to train is where it is shown that the policy makers were aware of and acquiesced in a pattern of constitutional violations

CANTON vs. HARRIS (continued)

involved in the exercise of police discretion. Such a pattern would put the municipality on notice that its officers confront a peculiar situation on a regular basis and that they often react in a manner contrary to constitutional requirements. This would amount to "deliberate indifference" or tacit authorization.

3. Impact on Law Enforcement

The need for training law enforcement personnel in the proper operation of law enforcement vehicles in an effort to provide enhanced public safety is very obvious. POST minimum guidelines and state legislation (e.g., 13519.8 P.C.) require certain training to occur. Updating training, and keeping it responsive to the needs of society is a method of assuring adequacy. All training should be periodically reviewed and critiqued as to its validity and relevance. If and when a driving tactic is added to an agency's accepted field procedures, it should be adequately trained. That is particularly important when the action can impact safety, whether it is for the public, the officer, or the suspect.

LEWIS vs. SACRAMENTO COUNTY (At time of printing: 96-1337, May 26, 1998)

Summary of Case

A deputy sheriff observed two juveniles on a motorcycle at the scene of a fight call that had been handled. The juveniles had driven up on the location at high speed not wearing helmets. They were not involved in the original disturbance. The deputy saw a city police vehicle's overhead lights come on, and the city officer yell something at the juveniles, but the deputy could not hear what was said because his windows were up. The city officer attempted to position his vehicle adjacent to the deputy's vehicle to prevent the two boys from leaving. They maneuvered slowly between the two patrol cars and sped off. The deputy initiated a pursuit, which lasted about seventy-five seconds, and covered 1.3 miles. Posted speed limits along the route were as

LEWIS vs. SACRAMENTO COUNTY (continued)

low as 30 miles per hour. The average speed of the vehicles was later calculated at 60 miles per hour, with a high speed of approximately 100 miles per hour. The pursuit went through four stop lights and three ninety-degree turns. During the pursuit, two cars and a bicycle were forced to swerve off the roadway. It is estimated that the deputy's following distance was as little as 100-150 feet. After the suspects' motorcycle crested a hill, the operator attempted to make a left-hand turn and skidded to a halt. After the deputy's vehicle came over the hill at a high rate of speed, he attempted to stop when he saw the stopped motorcycle in his path. The passenger was struck and killed by the deputy's vehicle.

2. Case Law Decision

The Supreme Court accepted an appeal of the Court of Appeals decision in this matter "to resolve a conflict among the Circuits over the standard of culpability on the part of a law enforcement officer for violating substantive due process in a pursuit case." The court established a necessary standard of "shocks the conscience," rather than "deliberate indifference" or "reckless disregard" to determine a violation of substantive due process under the Fourteenth Amendment. It further ruled that this standard had not been met in this incident. The Court stated that "a police officer does not violate substantive due process by causing death through deliberate or reckless indifference to life in a high speed automobile chase aimed at apprehending a suspected offender."

In addition, the Court found no violation of the Fourth Amendment related to search and seizure because "neither of which took place here." There was no argument as to a search, and the Court found no violation of seizure in this matter because the fleeing suspect's "freedom of movement" was not terminated "through means intentionally applied." The Court found no seizure "where a police officer accidentally struck and killed a fleeing motorcyclist during a high-speed pursuit."

LEWIS vs. SACRAMENTO COUNTY (continued)

The Supreme Court ruled that "conduct deliberately intended to injure in some way unjustifiable by any government interest is the sort of official action most likely to rise to the conscience-shocking level." The Court expressed the concern that "in circumstances of a high-speed chase aimed at apprehending a suspected offender, where unforeseen circumstances demand an instant judgment on the part of an officer who feels the pulls of competing obligations, only a purpose to cause harm unrelated to the legitimate object of arrest will satisfy the shocks the conscience test."

The Court stated that the officer "was faced with a course of lawless behavior for which the police were not to blame . . . had nothing to cause [the suspect's] high-speed driving in the first place, nothing to excuse his flouting of the commonly understood police authority to control traffic, and nothing (beyond a refusal to call off the chase) to encourage him to race through traffic at breakneck speed."

The Court recognized that "like prison officials facing a riot, the police on an occasion calling for fast action have obligations that tend to tug against each other. Their duty is to restore and maintain lawful order, while not exacerbating disorder more than necessary to do their jobs. They are supposed to act decisively and to show restraint at the same moment, and their decisions have to be made in haste, under pressure, and frequently without the luxury of a second chance. Police officers are often forced to make split-second judgments in circumstances that are tense, uncertain, and rapidly evolving.

A police officer deciding whether to give chase must balance on one hand the need to stop a suspect and show that flight from the law is no way to freedom, and, on the other, the high-speed threat to everyone within stopping range, be they suspects, their passengers, other drivers, or bystanders."

LEWIS vs. SACRAMENTO COUNTY (continued)

The Court declined to rule on the potential liability of the County under state law, instead dismissing the . . . claims against the County without prejudice to refiling in state court. It further found "no genuine factual dispute as to whether the County adequately trains its officers in the conduct of vehicular pursuits or whether the pursuit policy of the Sheriff's Department evinces deliberate indifference to the constitutional rights of the public."

3. Impact on Law Enforcement

A standard of "shocks the conscience" has been set as to a violation of constitutional guarantees of <u>suspect</u> rights under the Fourteenth Amendment. The primary consideration has been established requiring an "intentional act" to harm a suspect, or maliciously deprive that suspect of due process rights.

This ruling addresses issues related to civil claims involving fleeing suspects. The Court made it very clear "prudence would have repressed the reaction" to give chase under the circumstances of this case. The issue of balancing the need to show that using a vehicle to avoid arrest is no way escape justice versus the safety concerns that continuing to chase present was recognized by the Court.

Emphasis should be clearly stated in law enforcement pursuit training to continuously evaluate the "balance test" from moment to moment during the conduct of a pursuit. Safety and compliance with state laws and agency policy should continue to be the priorities in training and pursuit operation.

Agency Policies and Procedures

Agency driving policies must adhere to the California Vehicle and Evidence Codes as noted in this chapter. These regulations may be more stringent than statute law and may increase the risk of civil liability.

EVOC instructors should be familiar with various agency pursuit policies and ensure that students acknowledge their need to understand their agency pursuit policy and emergency driving procedures.

Chapter Seven

course summary and critique

Summary

- Planning should include time to summarize course content.
- This will allow the students a final forum to voice unanswered questions or eliminate confusion.
- Instructors will ensure that the original goals and objectives have been clearly met.
- The students should have been given the opportunity to acquire the necessary skills to properly implement their own unit's training program.
- There must be a common goal among all participants if an effective program is to result.
 - · Open communication between all is critical.
 - There must be a continuity of training, since the course will be implemented by different agencies.
 - Instruction should comply with methods emphasized in the Driver Awareness Course.

Critique

This course will provide a critique portion so that students can provide feedback to the EVOC Staff.



notes

Driver Awareness Course Outline

8-hour course

Course Goal

The student will recognize the basic driving principles, legal aspects and responsibilities, vehicle care and maintenance and the defensive driving components of vehicle operations. The student will be able to properly complete the driving exercises.

Registration Orientation (.25 Hour)

Learning Goal

The student will understand the safety rules and regulations and become familiar with the facility. The student will comprehend the purpose, philosophy and overview of the course.

- · Registration
 - Class documentation
 - Evaluation forms
 - Facility safety rules and regulations
- Course Purpose and Philosophy
 - Enhance the efficiency and safety of law enforcement vehicle operations
 - Reduction in accident statistics

Registration Orientation (continued)

- Departmental liability
- Proper use of basic driving principles
- · All principles are interrelated
- · Overview of Course

Basic Driving Principles (1.5 hours)

Learning Goal

The student will understand and identify the elements of the Basic Driving Principles and the importance and benefits of the use of safety belts.

- Basic Driving Principles
 - Weight transfer
 - Steering control
 - Throttle control
 - Speed judgment
 - Brake application
 - Roadway position
- Proper application and coordination results in safety and control
- Safety Belt Usage (Refer to Defensive Driving Addendum)

Legal Aspects (1 Hour)

Learning Goal

The student will understand specific California statutes, Code-3 driving tactics and case law decisions.

Vehicle Operations Liability

Legal Aspects (continued)

- Sections 17001, 17004, 17004.7, 21052(a) & (b), 21055(a) & (b), 21056, 21057, 21806, 21807, and 22350 C.V.C.
- Personal liability factors, 669 Evid.C.; 669.1 Evid.
 C.; Code-3 Driving Techniques.
- Case law decisions
- Agency Emergency Driving Policy

Vehicle Care and Maintenance (.25 Hour)

Learning Goal

The student will understand the importance of proper vehicle care and maintenance.

- Pre-shift Inspection
- Preventative Maintenance

Vehicle Operation Factors/ Defensive Driving (.75 Hour)

Learning Goal

The student will understand the components of Defensive Driving

- · Driving Skills
- Physiological Factors
- Driver Attitudes
- Driving Conditions/Special Conditions
- Collision Avoidance

Maneuvering Course Exercises (4 Hours)

Learning Goal

The student will demonstrate the ability to apply the proper driving principles in each exercise.

- Offset Lane Maneuver (Mandatory)
- Turn Around Maneuvers or Bootleg Turn Exercise (Select one)
- Steering Course, Chicane, or Vehicle Control Techniques Exercise (Select one)
- "T" Driveway, Angled Driveway, or "Y" Driveway (Select one)
- Parallel Parking Right or Left side (Select one)

Course Evaluation and Critique (.25 Hour)

Addendum

The following material is intended to aid Driver Awareness Instructors in expanding their knowledge in related areas of driver training. While preparing for and conducting the Driver Awareness Course, certain portions of the following will be directly used in the course (e.g., Rating Sheets).

Departmental needs and environmental conditions vary statewide for law enforcement. Instructors should utilize whatever information they feel is appropriate to supplement and improve the lecture portion of their course to fit their own priorities.



notes

Addendum 1

sample rating sheets

Document	Revised	# of Pages	Name of Form
Form1	8/98	2 pages	Driver Awareness Program
Form2	8/98	2 pages	San Bernardino County Sheriff's Department EVOC Checklist for Driver Awareness Training

DRIVER AWARENESS PROGRAM

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	B.	Rear Wheel Cheat					_	+		-
	C.	Speed Control					_	 	·	-
	D.	Smoothness and Coordination								_
	STE	EERING COURSE - REVERSE	I.I.							70
	A.	Steering Control					T			3
	B.	Front End Swing					+	 		-
	C.	Speed Control					+	+	 	
	D.	Visual Contact with Obstacles to Rear		· · · · · · · · · · · · · · · · · · ·			+	-	_	-
	E.	Smoothness and Coordination								-
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	C.	Rear Wheel Cheat					_			-
	D.	Speed Control					1	1		7
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SAN BERNADINO COUNTY SHERIFF'S DEPARTMENT EMERGENCY VEHICLE OPERATIONS COURSE CHECKLIST FOR DRIVER AWARENESS TRAINING

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2.	Steering Reverse	2				
3.	Road Position	3				
4.	Brake Application	4				·
5.	Front End Swing	5				
6.	Rear Wheel Cheat	6			•	
7.	Speed Control	7				-
8.	Visual Contact with Obstacles	8				
9.	Smoothness and Coordination	9				
PHA	ASE(I): OFFSET LANE	Forward	Reverse	REMEDIATION	DATE: INSTRUCTOR: (PL	EASE PRINT)
1.	Steering Control	1			COMMENTS:	
2.	Throttle Control	2				
3.	Road Position	3				
4.	Rear Wheel Cheat	4				
5.	Braking Application	5				
6.	Visual Contact with Obstacles	6				
7.	Smoothness and Coordination	7				
PH/	SEIII: PARALLEL PARKING	GRADE		REMEDIATION	DATE: INSTRUCTOR: PL	EASE PRONT)
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2.	Steering smoothness*	2				
3.	Entry Angle	3				
4.	Front End Swing	4				
5.	Visual Contact with Obstacles	5				
6	Compet Dodring 499 or Less	6				
٠.	Correct Parking 18° or Less	<u></u>	_			

8. Safe Exit

SAN BERNADINO COUNTY SHERIFF'S DEPARTMENT EMERGENCY VEHICLE OPERATIONS COURSE CHECKLIST FOR DRIVER AWARENESS TRAINING

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PH	ASEV: TEDRIVEWAY	Forward		Reverse	RE	MEDIAT	ON	DATE:	INSTRUCTOR:	(PLEASE PRINT)
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3.	Rear Wheel Cheat	3	1							
	Speed Control	4	1							
	Smoothness and Coordination	5	1							
6.	Visual Contact with Obstacles	6	1							
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Addendum 2

reference materials

EVOC Videotapes

SOURCE	THE TO SELECT THE SELECTION OF THE SELEC	MINUTES
1	Motor Mania	7
2	Broken Glass II	14
2	Pro Driving Tactics	15
2	Speaking Effectively to One or One Thousand	18
3	Ripley's Seat Belt Safety	8
3	Waterskiing on Four Wheels	13
4	Driven to Distraction	5
4	Emergency Lighting & Siren Audibility	7
4	LASD Fatal Traffic Collisions	9
4	Skid Control	12
4	Vehicle Operations: Decision Making Issues for Sergeants	13
4	Vehicle Operations: Decision Making Issues for Lieutenants	10
5	Extra Margin for Safety	19
5	Pursuit Immobilization Techniques (P.I.T.)	8
6	Arizona Pursuit	22
7	Top Driver	75
8	Hot Pursuit	17
9	Interactive Video Disk (Driver Training)	480
9	Pursuit Guidelines Telecourse	100
9	Pursuit Guidelines for Executives	45

reference materials

10	Anti-Lock Brake System	8
11	Anti-Lock Brake System	10
12	Police Pursuit	17

Sources

SOURCE	NAME OF SOURCE
1	Disney Educational Center
2	Aims Media, 6901 Woodley Avenue, Van Nuys, CA 91406-4878
3	U.S. Department of Transportation
4	LASD, 11511 Colima Road, Whittier, CA 90604 (562) 946-7841
5	CHP (916) 372-5620
6	Phoenix Police Department
7	National Safety Council
8	CBS 60 Minutes
9	California Commission on POST
10	Chevrolet Motor Division
11	Ford Motor Company
12	Motorola Teleprograms
13	Alert International Video Library (612) 454-1250

Addendum 3

defensive driving

Driving Skills

Peace officers should continually strive to improve their driving skills. This includes not only practicing proper driving techniques, but also becoming familiar with departmental policies relating to the operation of emergency vehicles, appropriate Vehicle Code sections, and developing an understanding of the patrol unit's limitations and capabilities. By continuing to develop proper driving skills, officers reduce the risk of becoming involved in traffic collisions. Remember that no matter what the circumstances, officers must always drive with due regard for the safety of other individuals using the highway.

Experience: Some people assume that more experienced drivers are naturally the better drivers; unfortunately, this is not always true. Over a period of time some officers develop poor driving habits. Speeding, failing to completely stop at stop signs, constantly accelerating through yellow lights, making unsafe turns or lane changes, impatience and discourtesy toward others who are using the highway are but a few characteristics that may increase the possibility of becoming involved in a traffic collision. Experience alone will not make you a better driver. Take the time to practice good driving techniques. With practice, good driving techniques will become a natural part of your driving pattern, and experience will have made you a better driver.

Psychological Factors

A number of factors follow which may significantly influence an individual's thinking and subsequent actions as they relate to the operation of an emergency vehicle.

1. Over-Confidence

Some drivers take too much for granted. They may narrowly avoid accidents and assume it is because of their superior driving ability. These types of individuals generally fail to realize that it could have been their own inattention or poor judgement that initially placed them in jeopardy. They tend to believe that only others may become involved in traffic collisions.

2. Pride

Some officers take pride in the fact that they have never lost a pursuit or that they are always the first ones on the scene. Some individuals may develop the idea that terminating a pursuit or "losing a suspect" is a form of failure, compromising their effectiveness in the eyes of their peers. Consequently, some individuals believe they have something to prove in order to be accepted by their peers. When driving under Code-3 conditions, some officers may disregard caution and common sense. By doing this they not only jeopardize their own lives, but the lives of others on the highway.

Do not allow false pride to override your own common sense and training.

Physiological Factors

A general overview of some physiological factors follow that could affect driving performance. Officers should become familiar with these concepts as they relate to the types of activities associated with the law enforcement profession.

Physiological Factors (continued)

1. Stress.

The nature of police work frequently subjects an officer to highly stressful situations. These situations usually occur without warning and may be preceded by a period of relative inactivity.

Stress causes an increase in blood pressure, injection of adrenaline into the blood stream, and impaired breathing. The nervous system may be affected to the extent that an individual's rational thought process may be impaired. Stress thresholds vary for each individual. A stress threshold can be described as that point where physiological reactions so impair the functioning of the senses that drivers becomes unaware of their surroundings. In the past, some drivers have been unable to recall any of the circumstances immediately preceding collisions which occurred during the Code-3 operation of an emergency vehicle.

2. Attention Failure.

Most people have experienced lapses of attention at one time or another. Unfortunately, the results can sometimes be fatal. As a driver's mind begins to wander, that person may suddenly miss a freeway exit, lose track of a conversation, or control of a car. Operating an automobile requires both attention and concentration. Tests have disclosed that drivers who have become involved in traffic collisions have shared certain deficiencies, one of them being attention failure.

From a physiological standpoint, people are more apt to suffer lapses of attention as stress is increased. A number of things may have a profound and adverse effect on many people. Alcohol and medication not only increase reaction time, but adversely affect a person's ability to concentrate on psychomotor tasks. Fatigue or illness have the same effect. Emotional stress significantly affects one's ability to concentrate.

Physiological Factors (continued)

Problems at home, worry about financial matters, anger, nervousness, or concern over dealings with others are examples of the types of things that can cause added stress in our daily lives.

Attention failure may have a profound effect on driving performance, causing otherwise competent drivers to place themselves or other users of the highway in jeopardy.

3. Vision.

Good vision is a prerequisite to safe driving. Drivers should regularly have their eyesight checked, particularly as they get older. Many factors can adversely affect visual acuity and depth perception, even in persons with 20-20 vision. Alcohol and drugs, including cold tablets, have a marked affect on acuity vision. Carbon monoxide produced while smoking cigarettes affects the retina of the eye. This is termed "anoxia" and is most pronounced under poor lighting conditions or at night, and it is substantially increased at higher altitudes.

Many officers find it desirable or necessary to wear sunglasses during daylight hours to prevent eye fatigue. Good quality sunglasses in no way damage eyesight, but proper selection of lenses must be made to ensure that protection is adequate and that the officer's vision is not adversely affected. The California Highway Patrol recommends a neutral gray lens. Lenses of other colors such as amber, blue, brown, violet, or rose may interfere with normal vision.

Officers should carefully select sunglasses to ensure that vision is not impaired by the tint of the lens. Sunglasses should never be worn at night.

Vehicle Abuse

On an average, patrol vehicles are expected to remain in service for approximately 2-3 years. With proper care and maintenance the unit can be expected to meet the demands placed on it during the course of each shift. Unfortunately, abuse of patrol vehicles by officers causes undue wear and the subsequent breakdown of many vehicles. Such things as unnecessarily overworking the brakes, downshifting at high speeds, causing the tires to break traction when accelerating, and driving over speed bumps, curbs or railroad tracks at inappropriate speeds will tend to contribute to mechanical failure.

Help maintain your patrol vehicle's performance capabilities. Do not unnecessarily abuse your unit. Repairing vehicles and taking them out of service for frequent or extended time periods costs a great deal, both in terms of money and time. Drive your patrol unit as if it were your own personal vehicle. Your life may one day depend on its performance capabilities.

Vehicle Selection

Prior to being accepted for use in law enforcement, vehicles undergo a series of tests designed to determine their capabilities as to acceleration, speed, maneuverability, braking, safety features, ease of maintenance, ergonomics, fuel consumption, and equipment installation access. Once the vehicle has been placed in service, it is up to the individual officer to assist in keeping it in a condition similar to which it was received.

Vehicle Maintenance

Mechanics are available to ensure that patrol units are repaired, tuned, and lubricated. The officer who drives the unit is in the best position to provide information that can assist the mechanic in properly maintaining the fleet of vehicles. This may include reporting anything from unusual engine noise and vibration to checking air pressure in the tires. Unfortunately, some officers fail to report these things or ignore them completely. This practice not only may lead to increased vehicle maintenance costs, but more importantly, it ultimately ieopardizes the safety of personnel using the vehicle.

Pre-Shift Vehicle Inspection

Officers are responsible for inspecting their patrol vehicles before bringing them into service. This will ensure that the units are in safe operating condition. The inspection need not be a time-consuming project. Most officers can develop a system that allows for a thorough check of the radio car in less than three minutes.

It is the responsibility of officers to ensure that their patrol vehicles are in safe operating condition at the beginning and conclusion of each shift. Any irregularities in vehicle performance should be reported immediately in writing, and if necessary, the vehicle removed from service. A preoperational check should include, but not be limited to the following:

1. General Vehicle Appearance

A visual inspection of the vehicle can reveal broken springs, torsion bars, shock absorbers, sway bars or even insufficient tire pressure. If the car appears to lean toward one side, "bouncing" the fender might indicate that something in the suspension system is broken or unsafe.

2. Tires

From a safety standpoint, tires are one of the most important parts of the vehicle and the easiest for officers to check. While smooth tires can provide a small amount of additional traction on dry pavement, the opposite is true on a wet or gravel surface. Good tire tread enhances puncture resistance and is vital for patrol driving.

Always check for sidewall cuts. Modern radial tires have a thin two or three-ply sidewall for flexibility. If the sidewall is cut, a blowout may result, causing loss of vehicle control.

Underinflation of radial tires has become a significant problem. A properly inflated radial tire gives the appearance of being underinflated because of the bulging sidewall. Consequently, it is difficult to judge tire pressure by visual inspection alone. Thus, a tire pressure gauge should be used. If the tire is obviously underinflated, then it is extremely low, possibly 15-20 pounds below the recommended tire pressure.

It is recommended that the "cold" tire pressure be maintained at the pressure mark on the sidewall. When a vehicle is driven, the temperature of the tire increases due to the rolling friction created between the tire and the road surface.

A rise in tire temperature could result in an increase of up to six pounds of pressure in the tire.

A tire that is five or more pounds below the recommended inflation pressure may sustain belt separation which could result in a blowout. Improperly inflated tires will also cause premature tread wear and poor steering response. Additionally, in a high speed turn an underinflated tire may roll off the rim.

Ensure proper tire pressure. This will increase the tread life of the tire. More importantly, proper tire pressure will usually help ensure maximum vehicle maneuverability.

3. Wheels

While checking tires, glance at each wheel. Hairline cracks normally develop adjacent to the lug nuts as this is the weakest point of the wheel.

4. Lights

Walk around the car or have another officer assist you while checking high and low beams, turn signals, stop lamps, emergency lights, and spotlights.

5. Trunk

Always inspect the contents of the trunk. The spare tire should be in good condition and properly inflated. Other items in the trunk should include, but not be limited to, the fire extinguisher, bumper jack, lug wrench, flares, hazardous materials guidebook, blanket and first-aid kit. Secure all gear within the trunk. Unsecured objects can damage radio and other equipment during quick turning maneuvers. Always ensure that the fire extinguisher is properly charged by checking the pressure gauge, and if it is locked to prevent accidental discharge.

6. Body Damage

Immediately report any vehicle damage to the appropriate supervisor in writing.

7. Entering the Vehicle

Check for dirt and trash on the floor. At high speeds, if any of the windows are rolled down, debris inside the vehicle could blow into your face and eyes.

Adjust the seat and mirrors. Start the engine and while it is idling, check the oil pressure, charging system and fuel level. Check the instrument panel, interior lights, horn, siren and radio. Check brake pedal height by applying pressure to the brake pedal. As a general rule, if the pedal travels several inches toward the floorboard or feels "spongy", the vehicle should be taken out of service and the brake system inspected by a mechanic. Pedal travel varies with each model of vehicle.

Check for excessive play in the steering wheel. More than one- sixteenth turn of play in the steering wheel should be considered unsafe and the steering unit should be inspected by a mechanic. Listen for unusual sounds in the power steering system while turning the wheel.

Check the parking brake to ensure that it works and is properly adjusted. Examine the windshield and windows for cleanliness. A film on the windows can cause eye strain and reduced visibility, especially at night. Inspect wipers for damage and proper operation.

Place your citation books, notebooks, clipboards, and other personal items where they will not interfere with your driving. Accidents can occur when loose articles slide across the dashboard and become lodged between the steering wheel and the dashboard.

Make sure all seat belts in the car are accessible. It is frustrating and dangerous to wrestle a combative arrestee into your car only to find that the seat belts you may need to restrain him have slipped under the seat.

Always remember to sit up straight when adjusting and fastening your seat belt. The lap belt should ride below the iliac crest (bony ridge) of the hip bone. If the belt is worn too high, an abrupt stop may squeeze the abdomen against the spine. Be sure the seat belt is not twisted. This could bind the retractor mechanism and interfere with proper release of the seat belt.

8. Leaving the Station

Listen for unusual sounds in the car. A worn out disc brake pad can make a metallic scraping sound as the wheel turns. A rhythmic clicking sound can signal loose lug nuts or a cracked wheel. Select a safe area at your first opportunity and gently weave the car smoothly back and forth a few times at 25-30 mph. The lateral weight transfer may allow you to hear a worn out wheel

bearing or noise from broken suspension components. Check the steering for excessive play, vehicle wandering, or pulling to one side. With no traffic behind you, use threshold braking from 30 mph to check brake effectiveness, brake pedal level, and to ensure that the brakes do not pull excessively to one side. (Remember that "cold" brakes may operate differently than after they are "warmed up.")

The pre-operational check can be accomplished in a few minutes. Establishing a set pattern is beneficial to ensure that all critical items are properly inspected at the beginning of each shift. Awareness of the mechanical condition of the vehicle should not end with the pre-operational check. Do not ignore sounds that appear strange or unusual. A bumping sound or oscillation in the steering system could indicate that a tire or wheel bearing is about to fail. A shimmy or vibration could indicate a loose wheel or drive shaft. Your sense of smell might warn you of developing problems. For example, antifreeze burning on a hot manifold creates its own unique odor. Should you recognize the acrid odor of burning wires caused by an electrical short, pull over and investigate before your lights or radio fail.

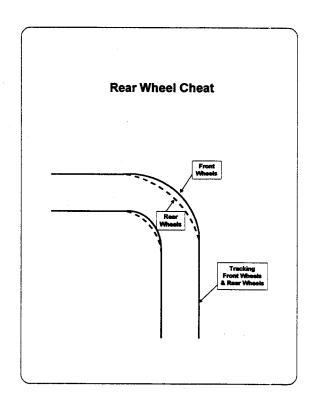
Taking the time to properly inspect your vehicle could ultimately save your life!

Vehicle Dynamics

A significant number of collisions involving on-duty personnel occur while operating vehicles at slow speeds, particularly in parking lots or while backing up. Many of these accidents involve fixed or stationary objects. Becoming familiar with the vehicle's dynamics will minimize the potential of low speed and/or vehicle placement collisions.

1. Rear Wheel Cheat

Rear wheel cheat occurs any time a vehicle is turned from a straight path. While driving forward and turning in either direction, the rear tires will follow a path inside of that traveled by the front tires. In most vehicles, the path of the rear tires may be as much as 36 inches closer to the inside of the turn than the path of the front tires.



The severity of rear wheel cheat is in direct proportion to the degree of turn attempted and the vehicle wheel base.

Consequently, the sharper the turn, the greater the rear wheel cheat. Most drivers have observed operators of a long truck or bus compensate for rear wheel cheat by turning wide around a corner to avoid having the rear wheels jump the curb.

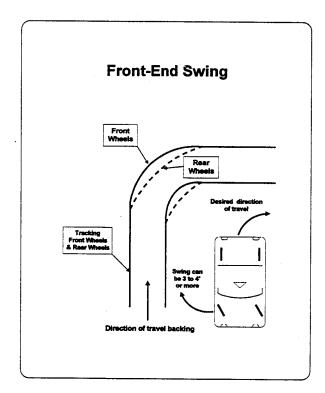
There are two methods of compensating for rear wheel cheat. The simplest method is to turn wide enough to allow space for the rear of the car to clear the hazard.

This may not always be possible in confined areas. Drivers must remember that the rear axle is the

pivot point of the car's turning movement and should proceed in a straight line until the rear axle is aligned with the hazard or curve. The turn can then be accomplished without any danger of the rear tires striking the curb. When operating in confined areas, a driver can best accomplish accurate vehicle placement by guiding primarily on the left side of the vehicle while leaving the maximum amount of available space on the right side.

2. Front-End Swing

Backing a vehicle brings different dynamics into play. The most obvious factors are limited vision to the rear



and the fact that vehicle steering is now reversed. The driver must assume a somewhat awkward posture to afford adequate rear vision. Remember, the rear axle is the pivot point of the turning movement. When backing, the front of the car will swing out as much as four feet opposite the direction that you are turning. This front-end swing can cause a collision if the driver fails to allow sufficient clearance. When backing and turning in confined areas, it is important to position the vehicle as closely as possible in the direction the vehicle is to be turned. A driver should turn the vehicle no more than necessary to accomplish the maneuver. This will minimize front- end swing and reduce the potential for a collision.

3. Brake Failure

This may generally be the result of a mechanical malfunction in the braking system. Loss of braking efficiency may occur after applying pressure to the brake pedal. Each situation will dictate what the best course of action will be. Down-shifting to the lowest gear available may reduce your speed enough to steer around a hazard.

Should total brake failure occur, the mechanical emergency brake should still operate. The emergency brake should not be applied to the point of locking the rear wheels except under the most dire of conditions. If the rear wheels are allowed to skid for more than a short distance, the driver could lose control of the vehicle. When using the emergency brake, application should be controlled with the left foot on the emergency brake pedal while the brake release is simultaneously disengaged with the left hand. This may prevent rearwheel lockup. Drivers experiencing total brake failure must remember that they still retain steering and throttle control of the vehicle. Panic and indecision can result in losing complete control of the vehicle when resolute action is most needed.

4. Brake Fade

Brakes may begin to lose efficiency after becoming overheated. This is termed brake fade, and is most often associated with drum brakes; however, disc brakes will also become affected. Brake fade usually occurs during frequent braking on steep downgrades or during a pursuit.

Each driver should understand the dynamics contributing to brake fade. Energy can be converted from one form to another. Kinetic energy, which is present by virtue of the movement or speed of an automobile, must be converted to heat in order to slow or stop a vehicle. This heat must be dissipated by the braking system as the vehicle stops.

As the speed of a vehicle doubles, i.e., 20 mph. to 40 mph, the kinetic energy increases fourfold. This means dissipating four times more heat, or taking four times as long to stop at 40 mph than would be required at 20 mph. If vehicle speed were tripled, i.e., 20 mph to 60 mph, stopping distance would be increased ninefold.

5. Left Foot Braking

Some drivers have acquired the habit of "left-foot braking" when driving a car equipped with an automatic transmission. Use of the left foot could, if positioned over the brake pedal at all times, slightly decrease the reaction time required to apply the brakes; however, unless the left foot is poised over or upon the brake pedal, it takes no longer to brake with the right foot. Following are some reasons that left foot braking should be avoided:

Vehicle Control

 A driver is best seated when the left foot is placed against the left floorboard of the car and the right foot is positioned over the accelerator pedal. This posture will stabilize the driver's position behind the steering wheel and help retain control during sudden maneuvers.

Loss of Braking Efficiency

During an emergency stop, braking with the left foot can cause both the accelerator and brake pedal to be depressed simultaneously. Not only will the engine try to keep the car moving, but the brake system's vacuum boost is reduced and more pedal pressure is required to effectively operate the brakes. Left foot "brakers" have a tendency to "ride" the brake pedal that will cause the brake lights to illuminate and the entire brake system to overheat. For most drivers, proper braking is best achieved with the right foot.

6. Wet Brakes

Wet brakes are a temporary condition. To impede normal braking efficiency, a vehicle must be driven through water deep enough to partially immerse the brakes. Disc brakes are more impervious to water, and dry sooner than drum brakes.

Wet brakes can result in poor response to brake pedal pressure, lengthened stopping distances, and brake pull. Brake pull is most apt to occur when only one of the front brakes becomes wet.

If only the left front brake becomes wet, the car may pull to the right and vice versa. Brakes may be dried by lightly riding the brake pedal with the left foot while driving at moderate speed for a short distance. Excessive or lengthy pedal "riding" may cause the brake pads or lining to become glazed and, subsequently, permanently inefficient.

7. Skids

One reason why skidding causes so many accidents is because of the aura of mystery and misinformation surrounding the cause, effect, and correction of skids. The untrained or inexperienced driver who knows little or nothing about the forces at play during a skid may suffer momentary panic and consequently do nothing, or react improperly.

8. Coefficient of Friction

An automobile is supported on a cushion of air that exists within the tires. Control of the vehicle is transmitted through tire "footprints". Each "footprint" is about the size of a person's hand. Changes of direction or speed are made by changing the direction of these "footprints". The cohesive quality between the rubber and the roadway is called the coefficient of friction. This coefficient of friction will vary depending upon the roadway surface or foreign substances on the roadway such as sand, oil, water, or ice. Basically, when one or more of the tires exceeds the coefficient of friction, a loss of adhesion to the roadway and subsequent skidding occurs.

9. Acceleration Skids

Acceleration skids involve only the drive wheels. To maintain control of the vehicle, wheel slippage may be reduced or stopped by easing up on the throttle, which will reduce torque to the drive wheels. Accelerating to the point of breaking wheel traction serves no useful purpose, placing tremendous strain on drive-train components, wearing out tires and resulting in slower acceleration.

10. Locked-Wheel Skids

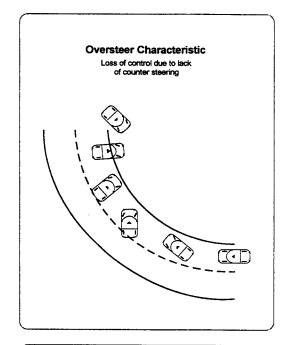
Locked wheel skids sacrifice all directional control of the vehicle and should be avoided. The front wheels steer only by rolling friction. With the brakes locked, all efforts to steer the car are futile.

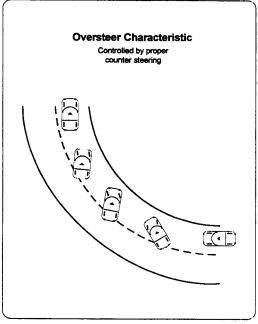
11. Impending Skids

An impending skid is a tire mark left on the roadway by a rotating tire just prior to the brakes locking.

12. Transfer of Weight

Weight transfer can be classified as either longitudinal or lateral. Before discussing weight transfer, a definition and explanation of oversteer and understeer should be given.





13. Longitudinal Weight Transfer

Longitudinal transfer of weight occurs while braking, accelerating, or decelerating. During acceleration, weight is transferred to the rear. This can increase traction and help a driver retain or regain control of the vehicle. As an example, a smoothly applied throttle during a moderate oversteer might help gain enough rear-wheel traction to straighten a vehicle's course. This example applies to rear-wheel drive vehicles.

Applying the brakes or decelerating transfers weight to the front of the vehicle and compresses the front suspension. If too much forward weight transfer is attained while entering a curve, the lightened end of the vehicle may become subject to oversteer. Forward longitudinal weight transfer may also prove hazardous if introduced prior to traversing dips, chuckholes, or railroad crossings.

Hard braking compresses front suspension components and lowers vehicle height when clearance and suspension movement is most critically needed. A driver unexpectedly encountering a hazard should brake and reduce speed as much as possible, then release the brakes.

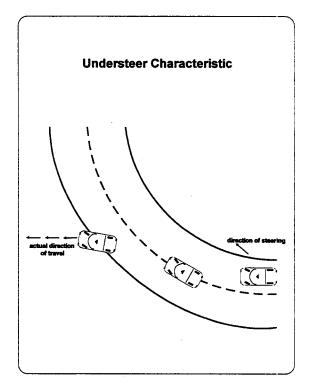
14. Lateral Weight Transfer

Lateral weight transfer occurs when a car is turned to the right or left. This movement causes the vehicle suspension to be compressed on one side and expanded on the other. Normally, as a turn is completed, the suspension system overcomes the effects of centrifugal force, returning the vehicle's chassis to its normal position. However, if the vehicle is turned in one direction and immediately turned in the opposite direction prior to stabilizing, this stored potential energy in the suspension system can induce a violent lateral weight transfer.

When negotiating a series of reversing turns, (that is, swerving from one direction to another), the transfer of weight can have a cumulative effect, each lateral transfer becoming more violent than the one preceding it. If not properly compensated for, the vehicle will ultimately spin out of control. Drivers must consider how their vehicles will react to each steering maneuver. Smoothness of operation in steering, braking and throttle usage are the only effective ways of minimizing lateral weight transfer.

Performance Driving Techniques

Instructor's Note: Redefine Oversteer and Understeer before presenting this topic. Performance driving can be defined as a driver's ability to fully utilize the performance potential of the vehicle. Proper cornering technique must be considered an important part of performance driving. Two basic factors to consider when turning a vehicle are entry speed and position of the vehicle prior to entering the turn.



Performance Driving Techniques (continued)

1. Entry Speed.

Entry speed is a critical factor. Turns should always be entered at safe speeds. Just because a driver manages to keep the car on the pavement through a turn does not mean that the speed prior to entering the turn was appropriate. At the proper speed a driver can maneuver the vehicle into the desired road position while negotiating a turn. At high speeds the vehicle will understeer and swing wide as it goes through the turn. Proper positioning of the vehicle through a turn will be impossible to attain if speeds are excessive prior to entering

the turn. If a turn is attempted at an unsafe speed, the driver can only attempt to keep the car on the roadway. Throttle application will cause additional problems. The rear wheels push only in the direction they are traveling and will most likely cause the vehicle to understeer, completing the turn on or toward the outside. Because the car is at the outer limits of adhesion, braking would have the same effect.

If a turn is inadvertently entered at an unsafe speed, it is generally advisable to decelerate and stay off the brake pedal.

Braking should be completed before turning and a constant safe speed maintained into the first portion of the turn, i.e., no acceleration. The rear end is lighter than the front end.

Performance Driving Techniques (continued)

Consequently, centrifugal force will pull it to the outside of the turn as in a skid. When this movement occurs, countersteering may be necessary to control any excessive sliding. Transfer of weight to the rear wheels by hard throttle application should not be attempted until the vehicle is leaving or being pointed out of the turn. Adhering to these rules provides the quickest way through a turn with the maximum degree of safety.

Excessive skidding through a turn defeats all good driving techniques and causes unnecessary vehicle wear. As tires skid sideways on the pavement, they scrub off speed in the same manner as would locking the brakes. Remember, drivers should be able to exit turns faster than they enter them.

90 Degree Turn Constant Radius Exit point Geometric apex Entry point

2. Road Position.

When positioning a vehicle to enter a turn, attempt to drive the car along the path of least resistance. This causes minimum stress to the vehicle, the least amount of weight transfer, and enables the driver to accelerate out of the turn, attaining a maximum curve exit speed. The curve should be approached from the "high side" or "outside" and in application, the driver should smoothly turn towards the driving apex. This positioning poses no hazard if the curve is entered at a safe speed. The driver should look beyond the driving apex to the exit point and attempt to move the vehicle in a long, smooth arc towards that point after passing as close to the driving apex as possible.

Performance Driving Techniques (continued)

While attempting to establish the proper position or line through a turn, the driver must scan the curve during the approach. The path of travel should bring the vehicle to the driving apex or low side just prior to being pointed out of the turn. The length of time and distance at the apex may vary depending on the radius of the turn being negotiated. The car should be held as close as possible to the apex to allow adequate distance when exiting the turn. Vehicle stress and weight transfer may be reduced by allowing the car to smoothly drift out to the high side (outside) upon leaving the turn. The driver should attempt to stay in an appropriate traffic lane after completing each turn.

3. Vision.

Vision is another important component of performance driving. Researchers have concluded that most drivers do not look far enough down the road when operating an automobile. This phenomenon occurs to a greater extent as vehicle speed is increased. During an emergency response, each driver must make a conscious effort to increase the visual horizon. Scan curves as far ahead as possible and mentally plot the course of the vehicle.

Collision Avoidance

Defensive driving has been the subject of numerous books and manuals. The underlying theme deals simply with how to avoid becoming involved in a traffic collision. Each of us has a responsibility to develop and maintain proper driving skills, including defensive driving.

Defensive driving may be defined as, "those techniques and concepts which emphasize awareness, control and the use of proper evasive action to avoid or prevent a collision". Defensive driving practices must always be used, and each driver should employ every reasonable means to avoid collisions.

1. Classifications of Traffic Collisions Related Damage to Law Enforcement Vehicles

Damage to law enforcement vehicles resulting from a traffic collision is either preventable or non-preventable.

- · Preventable.
 - This classification includes collisions which could have been prevented by the employee. The decision as to preventability shall be based on whether or not the operator was driving defensively and could have avoided the collision, regardless of whether or not the driver had the right of way. Any collision resulting from a violation of the California Vehicle Code or agency policy on the part of the employee can be classified as preventable.
- · Non-Preventable.
 - Collisions occurring while the officer was employing proper defensive driving techniques and had no opportunity to avoid the collision can be classified as non-preventable.
 - This classification may not be used if the employee commits any violation of defensive driving practices, Vehicle Code provisions, or agency policies.

2. Work Damage

Incidents classified as "Work Damage," "Operational Damage," or other similar wording generally include those factors related to vehicle or roadway surface conditions as the primary causes of the collisions. These may include factors such as a tire blowout which results

in loss of vehicle control or damage to the underside of a vehicle from objects on the ground. Some agencies use this category for collisions which occur during driver training activities.

The determination as to which classification applies can be made following a complete investigation of the incident.

3. Agency Policy

Statistical reporting of collisions and their categorization may be different in each agency. Some agencies do not categorize their collisions at all, but merely indicate the primary cause. Students should be referred to their agency policies and guidelines concerning collision reporting and classifications.

Following are a number of definitions and concepts which drivers should be familiar with.

4. Space Cushion.

This refers to the area immediately surrounding your vehicle and which can be utilized when taking immediate evasive action. Due to varying traffic conditions, it may sometimes be impossible to constantly maintain an adequate "space cushion" around your car. Drivers should avoid being boxed in by surrounding traffic whenever possible and allow themselves a "cushion" in at least one direction at all times.

Drivers can exercise the greatest degree of control over the area immediately in front of their vehicles. Many drivers consider a space of one car length between vehicles for every ten miles per hour traveled to be sufficient. Driver training experts now recommend use of the "three-second-rule" for proper vehicle spacing.

Simply begin counting as the vehicle immediately in front of you passes a fixed point, and allow yourself three seconds to reach that same spot. The space now provided will allow you sufficient time to react should some type of evasive action be required. At greater speeds or under adverse driving conditions, the space cushion should be increased to four or five seconds.

When stopped in traffic, try to allow enough room between your vehicle and the car directly in front of you to maneuver should you suddenly find it necessary. When stopped, try to leave enough room to see the rear tires of the car directly ahead of you. This should allow a space of approximately 20 feet in which to maneuver assuming there is adequate clearance behind your vehicle.

5. Intersections

Intersections can cause significant problems for drivers. Most busy intersections have some type of traffic control, e.g., traffic lights or stop signs. Regardless of traffic control devices, each driver must visually ensure that each intersection is clear of cross traffic before entering. Officers have been killed as the result of collisions occurring while they were legally within an intersection. Normally, one should scan traffic from left to right. Look to the left first because traffic coming from that direction is the first hazard you may encounter after entering the intersection. Always use extreme caution before entering an intersection when your view is even partially obstructed.

When approaching a traffic signal that is green, give some thought as to how long the light has been green. A "stale" green light can suddenly change, forcing you to stop abruptly. Should this occur, try to check your mirror for traffic behind you as you stop.

When stopping in an intersection to execute a left turn, signal and make sure other traffic is aware of your intentions. Do not turn your wheels to the left while stopped, because a rear-end collision could push you into opposing traffic. When opposing traffic appears to be yielding to your left turning movement, look for eye contact from the drivers or pedestrians involved. Once you have committed yourself to the turning movement, complete the maneuver as quickly and as safely as possible.

Right turns at intersections may also present problems. Under California law, you may make a right turn against a red light if it is safe to do so and there are no prohibiting signs. After stopping, as you look toward traffic approaching from the left, always take a second look back to the right. A pedestrian stepping in front of you or a bicyclist approaching from the right could be struck by your vehicle as you execute the turn.

6. Vehicle Stops

When initiating a traffic stop, the location, manner and position in which you stop your vehicle can be of importance in avoiding a collision. The location of the stop will not always be a matter of choice. Whenever possible, choose a location off the roadway. The most dangerous place to stop a car is, of course, in a traffic lane.

You have more control over the techniques of making the stop than you do in choosing the location. Try to plan far enough ahead so that your stop will not create a hazard for either yourself or other vehicular traffic. Attempt to direct the violator off the roadway whenever possible. If a stop is to be made on the roadway, utilize appropriate emergency lighting to warn traffic approaching from behind. Tests have shown that during darkness, sleepy or intoxicated drivers tend to drive directly toward flashing lights, while during daylight, flashing emergency lights may cause drivers to slow as they pass, creating an additional traffic hazard. If a

stop is made off the roadway or is not creating a hazard on the roadway, consider turning off your vehicle's emergency lights.

It is recommended that you stop your car slightly to the left and approximately 10 to 15 feet behind the vehicle you intend to approach. Be sure to set the parking brake before leaving your patrol car. Always make sure you are safe from traffic before stepping from your vehicle.

7. Backing

Approximately 20-30% of traffic collisions involving law enforcement vehicles occur while moving in reverse at slow speeds.

Even under ideal conditions, most backing maneuvers are potentially very hazardous. The possibility of having a collision increases if backing is done hurriedly or while failing to pay proper attention to your surroundings. If time permits, drivers should consider backing their vehicles into an appropriate parking position upon arrival. Remember that the rear overhang of a car is generally greater than the front overhang. This is a factor that contributes to a significant number of backing related accidents. However, many backing collisions occur because drivers fail to look where they are going and do not keep visual contact with obstacles behind their vehicle.

8. Lane Changes

Recently, California recorded 10,198 fatal and injury collisions in one year as a direct result of lane change/merging vehicle maneuvers. Two factors that contributed to a significant number of these collisions were drivers failing to properly signal their intentions to affected traffic and drivers failing to properly clear blind spots on either side of their vehicles. Rear and side view

mirrors do not afford drivers a complete field of vision to either the back or sides of their vehicles. Do not assume that it is safe to begin a lane change simply because you do not see any traffic in your rear or side view mirrors. Blind spots should be visually cleared prior to making any merging or lane change maneuver.

9. Use of the Horn

The horn can be a valuable defensive tool if used as intended, as a warning device. When in doubt, the defensive driver should not hesitate to utilize this means of communication.

10. Headlights

In addition to recognizing potential traffic hazards, drivers must also consider the importance of being seen by other drivers as a means of reducing potential accident risk. A number of researchers have concluded that utilizing headlights during the day can be a valuable aid in reducing the risk of having a traffic collision. Drivers are encouraged to use low beam headlights during all periods of reduced visibility, including fog, rain, and especially when the sun is setting behind their vehicles.

Headlights are an integral part of any Code-3 operation and can help to alert other drivers of the highway as to your presence. Many emergency vehicles are wired so that when the emergency red lights are activated, headlights, if in the off position, will automatically alternate between the right and left sides.

Special Conditions

Driving conditions may vary considerably depending on the time of year, geographical area, weather conditions, and even the time of day. This chapter deals with a number of factors affecting driving conditions.

1. Rain

Every driver should be particularly careful while driving in the rain as collisions increase during rainy weather. The first rains of the season can create extremely dangerous driving conditions by the mixing of dust, dirt, motor oil drippings and oil released through the asphalt pavement. Drivers should always anticipate a reduced coefficient of friction with the first rains following a dry period.

In addition to creating an extremely slippery driving surface, rain also reduces vision, particularly at night. Water on the pavement reflects light back into the air instead of down across the surface of the road. Often on a rainy night, roadway markings are all but impossible to see and a driver may not be able to differentiate between the shoulder of the road and the actual driving surface. Rain on the windshield also reduces vision, as does oil film. As vehicles operate under extremely heavy traffic conditions, this oil film will build up significantly on windshields within a relatively short period of time. Drivers should keep their windshields as clean as possible to maximize vision.

Window fogging can cause a significant reduction in vision. The temperature within the passenger compartment should be controlled to minimize window fogging. If the interior of the vehicle is kept too warm during rainy weather, moisture inside the car may evaporate, mixing with warm air and condensing on a cold windshield. The resulting condensation could completely obstruct vision through every window of the vehicle. Generally, operating the front defroster set on a cooler temperature is effective in controlling condensation. Utilizing the air conditioner with the heater thermostat selector on the "warm" setting will bring dry air into the vehicle and eliminate moisture condensation on the windows.

2. Hydroplaning

Dynamic hydroplaning occurs when a film of water begins to separate the normal contact area of the tire tread from the roadway. Three factors contribute toward dynamic hydroplaning. They include water depth, tire condition and vehicle speed. Before hydroplaning takes place, the tire tread must be submerged in water. Normally, even with adequate tire tread, only one-half inch of water is enough to cause hydroplaning. If treads are sufficiently worn, hydroplaning can result in less than one-quarter inch of water.

With a sufficient quantity of water on the roadway, total hydroplaning of a vehicle may be expected at a speed of approximately 58 mph. This speed is based on a formula developed by the National Aviation and Space Administration (NASA). Partial hydroplaning may occur at significantly slower speeds. During total hydroplaning, the tires travel across a sheet of water, above the surface of the roadway.

3. Directional Stability

During hydroplaning, directional stability might be maintained only because of contact between the rear tires and the pavement. This contact would be possible only if the front tires displaced a sufficient amount of water, a condition known as tire wipe. During hydroplaning, a gust of wind or any irregularity in the surface of the road could result in a total loss of vehicle control.

Each driver should always make certain that tires are in good condition. This includes proper tread and tire pressure. As tire pressure decreases, so does the minimum speed at which total hydroplaning may occur. The only effective way to prevent hydroplaning is to reduce speed appropriately when water begins to

accumulate on the roadway. Staying within the "tire wipe" of traffic ahead of you may help reduce the risk of hydroplaning.

4. Snow and Ice

While snowfall in many portions of California is rare, drivers may find themselves driving under relatively icy conditions. It is important that each driver understand the problems inherent in driving over snow and ice, and what defensive driving techniques may be employed to reduce the risk of becoming involved in a traffic collision.

Snow and ice can combine to create some of the most dangerous of driving conditions. A snow storm can reduce visibility to only a few feet. Perhaps the single most hazardous factor created by snow and ice is the sharply reduced coefficient of friction. Glare ice (ice with a smooth, glass-like surface) can produce a coefficient of friction as low as five percent, and the variation in traction over a single mile of roadway can be significant. Under these circumstances, drivers should use extreme caution because an icy portion of highway may not be visible. This unseen ice is frequently called black ice because it can be non-reflective and resemble bare pavement. Vehicle speed should be kept low and control of the vehicle must be pre-planned, smooth, and deliberate. On an icv road, never stop at the bottom of a hill, low side of a banked curve, or any place where another driver may not see you in sufficient time to stop.

Ice and snow tend to accumulate more in some places along roadways than others. Obviously, a shaded portion of roadway would retain ice longer than a sunny portion. Bridges and overpasses always freeze up sooner than the adjacent roadway surfaces because the

cold air under them reduces the temperature of the pavement surface. While the warmth of day might melt the ice which had accumulated along the surface of a highway, ice could remain on bridge surfaces.

Remember that as temperatures drop during the evening, ice may again form on highway surfaces, even though it may not have snowed or rained. When driving under these conditions, drivers must anticipate lengthened stopping distances and sharply reduced traction around curves.

5. Other Factors Contributing to Reduced Visibility

Fog, dust, and smoke can occur in sufficient concentrations to significantly reduce visibility. When this happens, speed must be appropriately reduced. Calculate your reaction distance by adding the first digit of your speedometer speed to the second digit.

Example: 30 mph = a reaction distance of 33 feet, while 44 mph = a reaction distance of 48 feet.

If you cannot see that far ahead, adjust your speed accordingly. When driving through smoke, dust, or fog during darkness, headlights should be operated on low beam. In thick fog, dust or smoke, high beam light will reflect back into your eyes, increasing glare and further reducing vision. When driving for a prolonged period of time under these conditions, the combined eye strain and concentration may have an adverse effect on the driver's judgement. Should you find yourself becoming unusually sleepy, consider pulling safely off the roadway and allowing a few moments to gather your thoughts, or, if possible, have a partner drive.

Fog can accumulate in relatively small, dense patches. This is frequently called tule (too-lee) fog because it is normally associated with lowlands or depressions on the highway. When driving through fog, remember that visibility can change from good to bad within a very short distance. It is important to be seen by other users of the highway. Do not hesitate to utilize emergency flashers and turn on headlights during daylight hours while traveling through thick fog.

6. Grades

Ascending a grade places greater demand on your vehicle's engine than does driving on a level road. This means that a lesser rate of acceleration should be expected while traveling up any significant grades. When passing traffic on a hill, the driver must allow a longer distance to complete the maneuver. Anticipate the actions of other drivers in traffic ahead of you. On occasion, another car may attempt to change lanes in front of you in order to pass a slower moving vehicle. If your passing speed is too great, a collision could occur.

A combination of carburetion and high engine compartment temperatures can adversely affect the performance and acceleration of your vehicle. Occasionally, drivers experience complete engine failure when attempting to pass utilizing full throttle. When passing, allow yourself sufficient space to pull back into your original position should the engine stall, or if passing takes longer than anticipated. While descending a grade, greater demand will be placed on the brakes due to momentum and because the weight of the vehicle is being "pushed" downhill.

7. Night Driving

At night, without any type of street lighting, drivers may find it impossible to see beyond the area illuminated by their vehicle's headlights. If there is no fog or thick amounts of dust in the air, drivers may utilize high beam headlights to illuminate a greater area in front of them, thus increasing the limits of visibility. However, while driving at night, drivers should always adjust vehicle speed to allow for sufficient reaction time.

During darkness, most drivers' depth perception and rate of closure are adversely affected. Before crossing or entering another roadway, it is advisable to double-check to ensure that cross traffic is not traveling faster than it appears. Keep in mind that other drivers might not accurately judge your speed. Severe right-of-way collisions can occur at night. On occasion, drivers responsible for causing accidents will admit seeing other traffic, indicating that they misjudged the vehicle's speed. It is not uncommon to pass over the crest of a hill or around a curve at night and find yourself blinded by the high beams of an oncoming vehicle. Do not stare directly into the other car's headlights; rather, attempt to focus your eyes toward the right shoulder of the road, away from the lights. This will allow you to see possible hazards better and will minimize the constriction of your pupils. This, in turn, will assist you in recovering and maintaining your night vision.

8. Wheel Off the Road

On occasion, you may find that the right wheels of your vehicle have drifted from the pavement onto a soft or low shoulder of the highway. Many fatal accidents have resulted from drivers improperly attempting to reposition their vehicles back onto the highway.

Attempting to quickly pull the car back onto the road could cause complete loss of vehicle control. Tires could hang up momentarily on the edge of the pavement; then, as the steering wheel is turned even more, the car could suddenly gain traction on the pavement edge and swerve across the roadway into opposing traffic or go into a broadside skid. In either case, the results could be serious.

If the right or left wheel leaves the pavement, ease up on the throttle and straddle the edge of the road. Keep a firm grip on the steering wheel and do not begin to brake until your vehicle begins to slow. When you have slowed down sufficiently, cautiously maneuver your vehicle back onto the roadway.

9. Tire Blowout

Today's vehicle tires are very durable; however, under certain circumstances, tires can and do blow out. This is an emergency which cannot necessarily be anticipated because it happens so quickly and without any advance warning. Your actions will obviously depend upon the circumstances at the moment. The following are some general rules to help drivers maintain control of their vehicles should a blowout occur. Expect the car to pull toward the side on which the blowout has occurred. Do not immediately jerk the wheel; rather, attempt to guide the car gradually in the safest direction. DO NOT INSTINCTIVELY BRAKE! Braking will pull the car more severely toward the side on which the blowout occurred, particularly if it involves a front tire.

10. Stuck Throttle

On occasion, drivers may experience a stuck throttle. If this happens, you must react quickly.

Braking will be of limited effectiveness because the push of the engine will quickly overheat your brakes.

Stamping on the accelerator once or twice, quickly lifting your foot each time, may correct this. If this does not release the throttle, attempt to pull it up with the toe of your shoe. If this fails, or if circumstances do not afford you enough time to attempt throttle release, TURN OFF THE IGNITION KEY. If necessary for deceleration, select a lower gear and pull off the road when safe to do so. Remember that you will lose power steering as vehicle speed decreases. The brakes will lose their power system after the first or second brake application. Expect to use heavy pressure on the brake pedal.

11. Hood Inadvertently Released

Federal regulations require that automobile hoods have a secondary or safety latch. This device is intended to function as a backup should the primary latch unexpectedly release. It is designed to prevent the hood from flying up while the car is in motion. Should both the primary and secondary latches fail and the hood releases at high speed, the results could be serious, especially if wind forces the hood back into the windshield. The upraised hood will block your forward vision. Usually, there will be a gap at the bottom of the hood just above the dashboard. If unable to see through this gap, your only choice will be to roll down your window and attempt to look around the hood as you slow down and pull off the road. Avoid a panic stop which may increase your risk.

12. Animals on the Road

In residential or urban areas, pets can appear on the roadway suddenly and without warning. When this occurs, even the most experienced drivers may have to fight the instinct to brake or swerve. If conditions permit, a driver may be able to take evasive action. Drivers must consider maintaining complete control of

their vehicles and the safety of other people using the highway over the safety of an animal that has strayed onto the roadway.

The size of an animal can dictate what action a driver might take. As an example, striking a small animal will seldom damage an automobile, but colliding with a large animal could seriously damage a car and even injure or kill the driver or other vehicle occupants. If faced with an imminent collision with a very large animal, consider taking some type of evasive action if at all possible. The car might sustain some damage but injury to the driver could be reduced.

Animals on the roadway may become momentarily stunned by the bright lights of a vehicle. If a driver can see what appears to be two or more small lights or reflectors (possibly animal eyes) at the shoulder of the road, the driver should immediately reduce speed and prepare to take possible evasive action. Deer usually travel in groups at night. Knowledgeable mountain drivers always slow if a deer crosses the roadway, even if the animal is well ahead of the car because additional deer may be in the area.

13. Engine Failure

Police vehicles are equipped with large engines, heavy duty suspension systems, transmissions and brakes, plus additional emergency equipment. The power brake and power steering systems are dependent upon engine operation to function properly. If the car is in motion when the engine fails, power steering will continue to function down to a relatively low speed if the transmission is left in gear.

The power brake system is actuated by engine vacuum. When the engine fails, a vacuum is no longer produced. If the brake system is functioning properly, a limited amount of vacuum may be stored within the system. Should the engine fail, this reserve vacuum will ordinarily allow for two power-assisted brake applications to bring the car to a safe stop, as long as the vehicle is in gear and the engine is turning.

Occupant Safety Devices

1. Safety Belts

Utilizing safety belts generally reduces the injury caused by the force of a collision. Safety belts reduce the force of impact.

- The use of safety belts minimizes the harm of the second or human collision. By taking the forces of the impact quickly (but not too quickly), the belts dissipate those forces through a relatively safe medium (belt itself) instead of through a dangerous medium (glass or steel).
- Safety belt usage helps vehicle occupants in six different ways:
 - There is the "ride down" benefit, in which the belt begins to stop the wearer as the car is stopping.
 - The belt keeps the head and face of the wearer from striking objects like the steering wheel, windshield, dashboard, or other law enforcement equipment.
 - The belt spreads the stopping force widely across the strong parts of the body.
 - Belts prevent vehicle occupants from colliding with each other.
 - Belts prevent vehicle occupants from being ejected from the vehicle during a crash.

Occupant Safety Devices (continued)

 Belts help the driver maintain vehicle control, thus decreasing the possibility of an additional collision.

· Belts should:

- Be worn across the hips and pelvic area, not across the stomach.
- Be adjusted to be snug across the body to prevent internal injury and provide safety and comfort.

2. Benefits of Wearing Safety Belts

- Safety belts have been proven to be the single most effective way of protecting people from serious injuries or death.
- Continuous POST studies regarding on-duty traffic collisions reveal that safety belts are effective in reducing serious injuries and fatalities.
- If one is driving without belts, a sudden swerve or a
 fast turn might cause that person to slide across the
 seat and lose control. This is especially true during a
 response to an emergency call or during a pursuit.
 Remember once this type of activity is undertaken, it
 is difficult to put the safety belt on.

3. Compliance

- Law enforcement officers should have a pre-driving routine that includes fastening the safety belt.
- For officer safety, the safety belt should be disengaged and retracted just prior to stopping the vehicle at a location which may involve law enforcement activity.

Occupant Safety Devices (continued)

• California law exempts officers from wearing safety belts unless required by their department policy.

Law enforcement officers who fail to use safety belts, and are injured in a collision, may be subject to a reduction in workers' compensation benefits, especially if they ignore a department regulation requiring their use.

4. Supplemental Restraint Systems (Air bags)

- Protects driver/passenger by absorbing a significantly greater amount of the crash forces than the driver could withstand.
- Acts as a pillow when activated in a front-end collision.
- Air bags are not designed to:
 - Protect you against a secondary collision because they deflate;
 - · Stop ejection from vehicle;
 - Open at side impacts (unless equipped with side air bags), rear-end impacts, slow speeds, bumps, dips, or minor collisions.
- Air bags are designed to supplement and not replace safety belts.
- Air bag information:
 - Air bags inflate at a rate of up to 200 mph and begin to deflate as soon as they are fully deployed, and you may still control the vehicle.
 - The powder the air bags are packed with will fill the car with a fine dust. This will dissipate quickly and is not harmful. Although it should be washed off soon.

Occupant Safety Devices (continued)

Driver should be at least 12 inches from the airbag. The US Department of Transportation states that persons of small stature should not be seated behind an airbag. A 9-3 hand position on the steering wheel and shuffle steering will help protect you if the bag deploys. Your hands may hit you in the face if they are in front of the bag when it deploys. Driving with your "thumbs up" on the wheel helps prevent their injury upon bag deployment.

- Your hands may be forced off the wheel upon bag deployment, causing momentary loss of steering control.
- Air bags are designed to deploy at 12-14 mph on a fixed object or at 28 mph on a moving object.
 A 35-degree or less frontal impact is necessary to cause deployment.
- Some vehicles are equipped with side impact airbags.

Crash Analysis

For years research people, particularly at Cornell University, have studied the nature of auto crashes. Here's what they calculate happens during those deadly tenths of the first second when an auto cruising at 55 mph crashes into a solid tree.

- In the first tenth of that fatal second, the front bumper and grill collapse.
- During the second tenth of a second, your hood crumples, rises, and strikes the windshield. Spinning rear wheels rise from the ground. Fenders begin wrapping themselves around the tree. The car frame is braked effectively, but your body is still moving 55 mph. Instinctively, you stiffen your legs for the jolt, but they snap at the knee joint.

Crash Analysis (continued)

- During the next tenth, your torso catapults from the seat. Broken knees ram into the dashboard. The steering wheel begins to collapse, and the steering column drives toward your chest.
- In the deadly fourth tenth of a second, two feet of the car's front end are totally demolished, but the rear end is still rushing onward at 35 mph. Your body is still traveling 55. Half a ton of motor plunges into the tree, and the car's rear rises as high as the tree's lower branches.
- In the fifth tenth, you are impaled on the steering column. Blood spurts into your lungs.
- During the sixth tenth, the force of impact has built up so that your feet are ripped out of tightly fastened shoes. The brake pedal shears off, the car frame buckles in the middle, your head bangs into the windshield while the rear wheels, still spinning, fall back to earth.
- And in the seventh tenth second, the entire car body is distorted. Hinges rip. Doors spring open. The seat flails loose, striking you from behind, but it doesn't matter, you're already dead.

You aren't around to experience the final three tenths of this horrible second. Neither are your passengers. It doesn't take long to die.



notes

Addendum 4

glossary

ABS

The Anti-Lock Brake System is a computer controlled system

which prevents a vehicle's brakes from locking up.

Acceleration

The rate of change of velocity with respect to time. It can be

expressed as feet per second².

Acute vision

Also known as visual acuity. The clear vision or that portion

of what a person sees that is in focus. It constitutes

approximately three to four percent of what a person sees, with

the rest falling under the definition of peripheral vision

Adhesion

The sticking tendency or traction relationship between two

surfaces.

Aggression

A hazardous attitude characterized by mean, angry and hostile

driving.

Apex

The tightest, innermost part of the vehicle path through a turn

(geometric apex).

Attitude

A state of mind - good, bad, or indifferent. Attitudes cannot be

directly observed but must be inferred from overt behavior,

both verbal and non-verbal.

Available roadway

The portion of the road available for your use. During normal

driving, the available roadway includes only your lane(s). During emergency response and pursuit driving, the available

roadway may include all lanes.

Balanced hand position

A wide grip on the steering wheel. Acceptable methods are a 9 o'clock and 3 o'clock position or an 8 o'clock and 4 o'clock position.

Balancing Test

In the context of this document, <u>balancing test</u> is an ongoing decision process employed by law enforcement officers and supervisors to analyze the cost(s)/benefit(s) of initiating, continuing and discontinuing a pursuit. It considers outcomes (positive and negative) in support of the decisions to initiate, continue and discontinue a pursuit.

Black Ice

An invisible thin sheet of extremely slick ice that is non-reflective and resembles bare pavement. It generally has a lower coefficient of friction than other types of ice.

Brake fade

The loss of braking efficiency normally due to heat build-up resulting from excessive use.

Brake lock-up

The application of brakes to the point that the wheels can no longer rotate.

Braking distance

The distance through which brakes are applied to slow a vehicle; (minimum braking distance is the shortest distance in which a particular vehicle can be stopped by braking from a specified speed on a particular surface); the distance from application of brakes to collision or stop.

Braking, extended release

Begins with straight line threshold braking and extends the release of the brake into the turn to the apex.

Caravanning

A line of law enforcement vehicles following each other while in pursuit of a law violator.

Caster effect

The design characteristic of a vehicle that helps to straighten out the front wheels after driving around a corner.

Centrifugal force

The force on a body in a curved motion that is directed away from the axis of rotation. A force which acts or impels an object away from the center of rotation.

Centripetal force The force on a body in a curved motion that is directed toward

the center axis of rotation. The force required to keep a moving mass in a circular path. A force which acts or impels

an object toward a center of rotation.

Closure rate The appropriate rate of deceleration necessary to negotiate a

curve, avoid a hazard, or stop.

Code-3 Operation of an emergency vehicle with red lights and siren in

compliance with Sections 21055 and 21056 CVC.

Coefficient of friction The measure of adhesion between two surfaces (e.g., a tire and

the roadway).

Collision An impact caused by a sequence of events that produces

unintended injury, death, or property damage. Sometimes

incorrectly called an accident.

Collision avoidance Maneuvering the vehicle from the intended path of travel

quickly and efficiently to an alternate path of travel, when the

intended path of travel becomes unsafe.

Countersteer Turning the front wheels to counter the effects of a previous

turning movement or of a skid, to put the vehicle on its

intended course of travel.

Deadly force An action or force likely to cause death or great bodily harm

(e.g., roadblocks, ramming and use of firearms).

Deceleration The change of speed as the vehicle slows down.

Discontinue In the context of this document, discontinue describes the

decision and actions of the pursuing law enforcement driver(s) who stops chasing the fleeing vehicle. Actions to discontinue the pursuit may include turning off the emergency light(s) and siren, reducing speed, observing the applicable rules of the road, allowing the distance between the law enforcement vehicle and the fleeing vehicle to increase, changing direction away from the fleeing vehicle and notifying the dispatch center

that the pursuit has been discontinued.

Driving, defensive

Operating a vehicle in such a manner as to be able to avoid involvement in a collision, no matter what the conditions.

Driving, emergency response

A response to a situation that is life threatening or that involves a crime in progress with a strong likelihood of a response related arrest; justifies the legal use of emergency warning devices.

Driving, non-emergency (patrol)

All operations of a vehicle in other than an emergency or pursuit mode.

Driving, pursuit

The act or instance of chasing or pursuing a fleeing vehicle in an attempt to apprehend the driver and/or occupants.

Ego

A personality component that controls behavior. A state of mind that may cause a law enforcement officer to disregard caution and common sense.

Emergency

A situation in which there is a direct threat to a person's life and for which a rapid response by law enforcement will diminish the threat. Also, a crime in progress reported with sufficient promptness to demonstrate the strong likelihood of a response related arrest.

Emergency warning device

A solid red light to the front and a siren that meet the requirements of state statute(s).

Evasive action

Any action taken by a driver to avoid a hazardous situation. Steering, braking, or accelerating to avoid a collision or other accident.

Failure to yield

In the context of this document, <u>failure to yield</u> refers to the actions of a vehicle operator who fails to stop or respond to the emergency light(s) and siren of a law enforcement vehicle. Generally, the vehicle operator continues to travel forward at or below the speed limit, observes traffic control devices and other applicable rules of the road, and does not change the direction of travel in an evasive manner.

Fight or flight mechanism

A reaction characteristic of all higher forms of animal life to an especially stressful situation. It prepares the animal/human to escape or fight by sending more blood to the skeletal muscles in order to sustain them during a fast attack or retreat.

Following

In the context of this document, <u>following</u> refers to the actions of a law enforcement officer to stay behind a vehicle and attempt to keep the vehicle in sight, while complying with applicable laws and rules of the road.

Footprint (contact patch)

The area of the tire in contact with the roadway surface.

Force

An influence (e.g., a push or pull) that causes motion or change of motion.

Force, centrifugal

The force on a body in a curved motion that is directed away from the axis of rotation. A force which acts or impels an object away from the center of rotation.

Force, centripetal

The force on a body in a curved motion that is directed toward the center axis of rotation. The force required to keep a moving mass in a circular path. A force which acts or impels an object toward a center of rotation.

Friction

Resistance to any force trying to produce motion; constantly present and always working opposite the direction in which an object is being moved. A force of resistance acting on a body which prevents or inhibits any possible slipping of the body.

Front end swing

The movement of the front end in the opposite direction of the steering input when backing up.

Front wheel skid

Occurs when the front tires have lost their adhesion to the ground and the vehicle does not travel in the direction that it is being steered.

Full throttle

Depressing the gas pedal to the floor. This action can result in loss of traction and control.

Guideline In contrast to policy, which may prescribe or define courses of

action or decision-making options, guidelines, in the context of

this document, describe suggested discretionary actions

regarding formulation of policy.

Hydroplaning Tires ride upon the water causing loss of contact with the

surface of the road. Contributing factors are water depth, tire

tread depth, tire pressure, and vehicle speed.

Hyperventilation Abnormally rapid or deep respiration in which excessive

quantities of air are taken in, causing buzzing in the ears,

tingling of the extremities, and dulled perception.

Impatience A hazardous attitude characterized by tension caused by the

feeling of always being in a hurry.

In the context of this document, intervention tactics refers to

specific operational tactics (e.g., pursuit immobilization tactics [PIT], blocking, ramming, boxing, tire deflation device and roadblock procedures) intended to disable a fleeing vehicle or

otherwise prevent further flight or escape.

Lack of confidence A hazardous attitude characterized by an underestimation of

one's driving ability, often to the point of fear of driving.

Late apex The point in a turn where you can see the exit from the turn.

Late steering The tendency, while driving in reverse, to input steering late

due to the fact that the wheels that provide steering are

following the driver. The rear of the vehicle must be pointed

by the proper use of the front wheels.

Lateral weight

transfer

Turning right transfers weight to the left side of the vehicle and turning left transfers weight to the right side of the vehicle.

Legal intervention The use of force to terminate a pursuit situation.

Liability, criminal The liability that is imposed upon a person who is guilty of

gross negligence or misconduct.

Liability, direct civil

The liability that is imposed upon a person or agency for causing injury to another through negligence or willful misconduct.

Liability, vicarious civil

The liability that is imposed upon one who is without personal fault or complicity, because of the relationship that the person bears towards the person who actually performed the wrongful act or omission.

Longitudinal weight transfer

Acceleration that causes weight to transfer to the rear axle. Braking or deceleration that causes weight to transfer to the front.

Maximum acceleration

Acceleration as quickly as possible to full throttle without losing traction

Negligence

For civil litigation in some states it is the failure of a law enforcement officer to conform his or her conduct to the standard, which a reasonable law enforcement officer would have conformed under the same or similar circumstances. In other states an officer is held to a standard of the "reasonable man".

Offender

In the context of this document, offender refers to the subject operator and/or occupant(s) of a pursued vehicle. Based on an agency's own standard for authorizing or continuing pursuits, the offender may or may not have violated a statute to become a legitimate object of a pursuit (i.e., initial reasons for attempting to stop an individual may include: investigation, suspicious activity, or reasonable suspicion of a violation of statute).

Optimum throttle

The amount of throttle necessary to obtain and maintain desired speed.

Over-confidence

A hazardous attitude characterized by exaggerated opinion of one's driving ability and vehicle handling ability.

Oversteer

Reduction of traction to the rear tires during a steering movement causes the rear of the vehicle to slide to the outside.

Overtaking An active attempt to catch up to a motorist who is not aware of

an officer's signals to stop.

Peer pressure A hazardous attitude characterized by allowing real or

perceived peer influence to override one's better judgement.

Perception An awareness of objects and other data through any of the

senses.

Peripheral vision A lateral degree of perception present when the eyes are

focused straight ahead.

Physiological factors Factors such as vision, hearing, and fatigue that can interfere

with defensive driving.

Policy In the context of this document, the following best defines the

definition of a policy:

"Although 'policy' can be defined to mean a guideline for carrying out even the most detailed action, the term usually

refers to the broad statement of principle."

"Policy may consist of values and principles which guide an agency's behavior or performance of its activity. It reflects a statement of guiding principles that should be done in order to

achieve an agency's objectives."2

Preoccupation A hazardous attitude characterized by thinking of other things

besides driving.

Psychological

factors

Factors such as attitudes and emotions that can interfere with

defensive driving.

Psychomotor skill A muscular proficiency or dexterity.

O.W. Wilson and Roy Clinton McLaren. Police Administration, 4th ed.,

Manual of the Los Angeles Police Department. Volume 1/010, Policy, Los Angeles, 1992.

Pursuit An event involving one or more officers attempting to detain a

suspect operating a motor vehicle while the suspect is

attempting to avoid arrest by using high speed driving or other

evasive tactics, such as driving off a highway, turning suddenly, or driving in a legal manner but willfully failing to

yield to the officer's signal to stop.

Pursuit, high speed A pursuit involving a law enforcement officer traveling at a

speed well in excess of posted or prima facie limits.

Reaction time The time after you have perceived the danger until the action is

initiated (usually between .5 to 1.5 seconds). Reaction time may be affected by fatigue and use of drugs and alcohol.

Rear wheel cheat While driving forward during a turn, the rear tires will track

along a path inside that of the front tires.

Rear wheel skid The skid occurring when the rear wheels have lost their grip

with the road.

Right of way Rules governing situations when multiple vehicles are

competing for the same space.

Roadway position The position of the vehicle on the roadway that maximizes

speed with minimum steering and risk of loss of vehicle control

while negotiating a turn. Also known as "driving line".

Rolling friction Directional friction caused by tire rolling along the road

surface. Implies that the front wheels of vehicle must be

rolling in order for the vehicle to be steered.

Rules of the road Rules prescribed for any citizen operating motor vehicle on

California highways.

Self-righteousness Hazardous attitude characterized by the tendency to think that

one is always right.

Shuffle steering A balance

A balanced two hand steering method with the right hand controlling the right half of the steering wheel, and the left hand controlling the left half of the steering wheel. Both hands remain in contact with the steering wheel and do an

equal amount of work.

Siren Device used to generate and transmit the easily recognized

oscillating sound whose frequency varies with time, used as

warning signal by police vehicles, fire vehicles, and

ambulances. There are two types of sirens; wail and yelp.

Siren syndrome A physiological condition (adrenaline flow, increased heart and

respiration rate) caused by the stresses of Code-3 operation that may affect decision-making skills of a law enforcement officer.

Skid The loss of traction to one or more wheels.

Skid, braking The loss of traction when one or more wheels are locked by

excessive braking pressure.

Skid, cornering The loss of traction in negotiating a curve or turn at a speed

faster than can be sustained by the tire-road cornering traction

limits.

Skid, secondary Skid in the opposite direction of the original skid.

Space cushion The open area surrounding the vehicle while it is in motion

allowing an "escape route" to the front, rear and/or sides.

Space management The selection of the best speed control, path of travel, or

communication technique to maximize control of the space

surrounding the vehicle.

Speed judgement The driver's ability to evaluate how the present speed of the

vehicle can be increased or decreased to meet the next driving

task.

Spring loading Energy that builds in vehicle springs when the vehicle

experiences weight transfer. This energy is released when the

springs unload.

Steering recovery

Controlled reduction of steering input causing a vehicle to

return to a straight line of travel.

Stopping distance

Refer to braking distance.

Stress

Mental, emotional, or physical strain or distress that can dull perception and initiate the body's fight or flight mechanism.

Supervisor

In the context of this document, a supervisor is a person who has specific, formal responsibility for issuing orders and providing direction to subordinates. Supervisory responsibility may begin at any level and extend to the highest executive

level in an agency.

Terminate

In the context of this document, terminate is used interchangeably with discontinue. See the definition of

discontinue, above.

Threshold braking

Application of braking force to the point just prior to wheel lock-up, bringing the tire to the threshold of a locked wheel skid. May be more efficient at slowing a vehicle than locked

wheel braking.

Throttle

Gas pedal, accelerator.

Tracking

Traction

A tendency of law enforcement drivers to concentrate on a fleeing vehicle to the point that they (the officer) begin to unconsciously duplicate the suspect's unsafe driving maneuvers.

A tendency of law enforcement drivers to concentrate on a fleeing vehicle to the point that they (the officer) begin to unconsciously duplicate the suspect's unsafe driving

maneuvers.

Traction limit

The upper limit of the traction available to keep a vehicle under

control.

Training, refresher Training given to a person after being inactive for a period of

time. Or, training given to freshen knowledge, skills, and

abilities infrequently used.

Understeer Reduction of traction of the front tires tends to cause the

vehicle to continue in a straight line with lessening of directional steering control (usually induced by excessive

speed).

Vehicle abuse Behaviors and driving actions that lead to mechanical failure of

the vehicle.

Vehicle capability The mechanical and handling capability of the vehicle.

Vehicle control Developing an understanding of the principles and developing

the proficiency pertaining to the successful operation of

vehicles under all driving conditions.

Vehicle dynamics Any physical force that affects the control and direction of a

vehicle in motion.

Velocity The rate of change of position relative to time.

Visual horizon The point at which a driver's eyes are focused on the roadway.

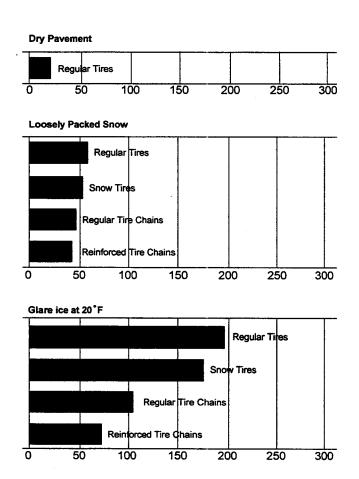
Weight transfer The transfer of weight to the front, rear, or either side caused

by acceleration, deceleration, or turning.

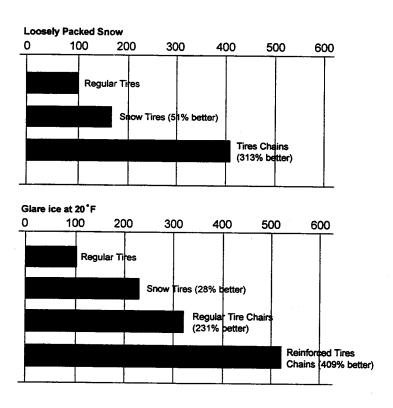
Addendum 5

training aids

Comparative Stopping Ability - Vehicles Average Braking Distance in Feet 20 MPH



Comparative Starting Ability - Vehicles Average Traction Ratings (Regular Tire = 100)



.357 Magnum Revolver



Weight of Bullet

158 grains

Muzzle Velocity

, 1100 fps. (750 mph)

Foot pounds of energy at muzzle

* The VEH produces 1000

times more energy than the bullet

Car



Weight of Vehicle

3500 pounds

Velocity

88.02 fps. (60 mph)

Foot pounds of energy at impact with stationary object

421,060

Addendum 6

lesson plans

Introduction

Lesson plans are the information increments of the training program. These plans enable training managers to determine what is being done to meet the broad objectives set by the organization. Serving as blueprints for what is being done at any given time in the teaching/learning system, they prevent duplication of effort. By simply following the blueprint, the assigned information can be covered by the instructor.

It is the training director's function to develop the overall course plan in accordance with the organization's mission, its budget and the organization's training philosophy. The training director communicates the broad picture to his instructors, and it is the individual instructor who prepares the actual lesson plan. Lesson plans assure that no facet of the subject is left untaught.

Defined

Briefly described, a lesson plan is a document that sets forth the objectives to be attained in a single lesson, the content to be learned, the means by which the objectives are to be achieved, and the content acquired. It is more than just an outline of what trainees are to learn. It must also include how the facts, principles, concepts and skills are to be taught.

The purposes served by a lesson plan are as follows:

• To ensure that the instructor has considered all factors necessary for an effective lesson.

Defined (continued)

- To guide the instructor in conducting learning activities; keep pertinent materials; ensure smoothness, order and unity in presentation; prevent the introduction of digressions, detours and irrelevancies; and guard against the omission of essential materials.
- To help instructors maintain a constant check on their activities as well as on the progress of trainees.
- To standardize instruction for all training groups whether conducted concurrently or in different time frames.
- To serve as a blueprint for substitute instructors.
- To inform managerial personnel of what is being taught to trainees and how it is to be presented.

Preparation

Preparing a lesson plan requires organizational ability. To prepare a sound lesson plan, it is necessary to draw upon experience, observation, interview and literature.

Instructors draw from their experience, ideas, approaches, data and other background information. Experience suggests the appropriate strategy for teaching and helps in the development of case histories, anecdotes and critical incidents related to the subject.

Experience is intended to include educational experience as well as actual experience as an instructor. Obviously if the instructor is new, it will be necessary for the supervisor to closely follow lesson plans being developed. The lack of experience as an instructor can partially be compensated for by observation, interview and literature.

Observation of the job, operation, or skill to be taught is essential. Usually, our experience as law enforcement officers negates the necessity for this, but it should be done where necessary.

Preparation (continued)

Many instructors are experts in their subjects. Being an expert does not mean that instructors cannot learn more about the subject. They should make it a practice to interview a representative number of those currently working on the job. This is especially true to instructors who teach in many localities. Just talking to persons on the job gives an instructor an insight to the "local ground rules" and it may suggest good locally known case histories and anecdotes which relate the subject being taught to the local situation.

A search of literature, i.e., books and law enforcement journals, which pertains to the subject usually helps in the preparation of lesson plans. A review of literature is not a substitute for experience, but it does function as reinforcement for experience and it assists the instructor in remaining current in the subject matter.

The Lesson Plan

Standardization of lesson plans is helpful to the instructor. The primary purpose of a lesson plan is to ensure consistent coverage of the necessary material. The lesson plan can also serve as a guide when an instructor must be absent and it would be impossible for a substitute to develop a new lesson plan in time to conduct the course.

Each of the following elements should be included in a written lesson plan. To provide guidance in preparing a lesson plan, the elements will be stated to include examples of areas to be considered by the instructor.

Preparation

- Determine the students' needs.
- Select and organize the subject matter.
- Determine which methods and techniques of instruction to use.
- Task analysis.

The Lesson Plan (continued)

- Prepare or procure training aids.
- · Prepare instructional objectives.
- Research and testing.
- Practice sessions.

Introduction

- Introduction of the instructor.
- Introduction of the subject.
- · Attract the students' attention.
- · Arouse the students' curiosity.

Presentation

- Motivate the students to learn.
- Present subject matter in logical, orderly, step-by-step sequence.
- Obtain maximum student participation.

Application

- Provide for immediate application, if at all possible.
- If conducted at a later time, the key issues should be reviewed prior to application.

Testing

- Determines effectiveness of instruction.
- Serves to motivate student to acquire desired learning.

The Lesson Plan (continued)

- Emphasizes areas considered important by the person designing the test.
- Assists in ranking students.
- Locates areas where instruction has not been effective.

Summary

- Recap main points.
- Strengthen weak points of instruction.
- Provide for student participation.
- · Never introduce new subject matter in this phase.

Assignment

- Provide for outside application of what has been taught.
- Prepare for next lesson.

Conclusion

The lesson plan need not be structured as though it were a publication for distribution. It is always in a state of growing or being amended. The lesson plan is a guide to call the instructor's attention to necessary preparation and materials. It reminds the instructor what to say and do, the order of presentation and the time to be allotted. It refreshes the instructor's memory regarding the objectives of the lesson and assists with organization in evaluating the effectiveness of the training. It also documents what information was provided during training.



notes

Addendum 7

13519.8 pc

Penal Code Section 13519.8

Section 1. Section 13519.8 is added to the Penal Code, to read:

November 1, 1994, a course or courses of instruction for the training of law enforcement officers in the handling of high-speed vehicle pursuits and shall also develop uniform minimum guidelines for adoption by California law enforcement agencies for response to high-speed vehicle pursuits. The guidelines and course of instruction shall stress the importance of vehicle safety and protecting the public at all times, include a regular assessment of law enforcement's vehicle pursuit policies, practices, and training, and recognize the need to balance the known offense and the need for immediate capture against the risks to officers and other citizens of a high-speed pursuit.

As used in this section, "law enforcement officer" includes any officer or employee of a local police of sheriff's department or the California Highway patrol.

Penal Code Section 13519.8 (continued)

- The course or courses of basic training for law enforcement officers and the guidelines shall include adequate consideration of each of the following subjects:
 - · When to initiate a pursuit.
 - The number of involved law enforcement units permitted.
 - Responsibilities of primary and secondary law enforcement units.
 - · Driving tactics.
 - · Helicopter assistance.
 - Communications.
 - · Capture of suspects.
 - Termination of a pursuit.
 - · Supervisory responsibilities.
 - Blocking, ramming, boxing, and roadblock procedures.
 - Speed limits.
 - · Interjurisdictional considerations.
 - Conditions of the vehicle, driver, roadway, weather, and traffic.
 - Hazards to uninvolved bystanders or motorists.
 - Reporting and postpursuit analysis.

Penal Code Section 13519.8 (continued)

 All law enforcement officers who have received their basic training before January 1, 1995, shall participate in supplementary training on high-speed vehicle pursuits, as prescribed and certified by the commission.

Local law enforcement agencies are encouraged to include, as part of their advanced officer training program, periodic updates and training on high-speed vehicle pursuit. The commission shall assist where possible.

• The course or courses of instruction, the learning and performance objectives, the standards for the training, and the guidelines shall be developed by the commission in consultation with appropriate groups and individuals having an interest and expertise in the field of high-speed vehicle pursuits. The groups and individuals shall include, but not be limited to, law enforcement agencies, police academy instructors, subject matter experts, and members of the public.

The commission, in consultation with these groups and individuals, shall review existing training programs to determine the ways in which high-speed pursuit training may be included as part of ongoing programs.

 It is the intent of the Legislature that all local law enforcement agencies adopt the minimum guidelines on high-speed vehicle pursuit developed by the commission.



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